

March 23, 2001

State of Utah
Division of Oil, Gas & Mining
Attn: Brad Gill
1594 West North Temple - Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Application for Permit to Drill Well No: 13A-22-8-17, 14-22-8-17, 15-22-8-17, and 16-22-8-17.

#### Dear Brad:

Enclosed find APD's on the above referenced wells. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier Permit Clerk

mc

enclosures

cc:

Jon Holst

Denver office well file Pleasant Valley well file

RECEIVED

MAR 2 6 2001

DIVISION OF OIL, GAS AND MINING

FORM 31a-0-3 (December 1990)

SUBMIT IN TRIPLICATE\*
(Other instructions on reverse side)

n approved. get Bureau No. 1004-0136 Expires December 31, 1991

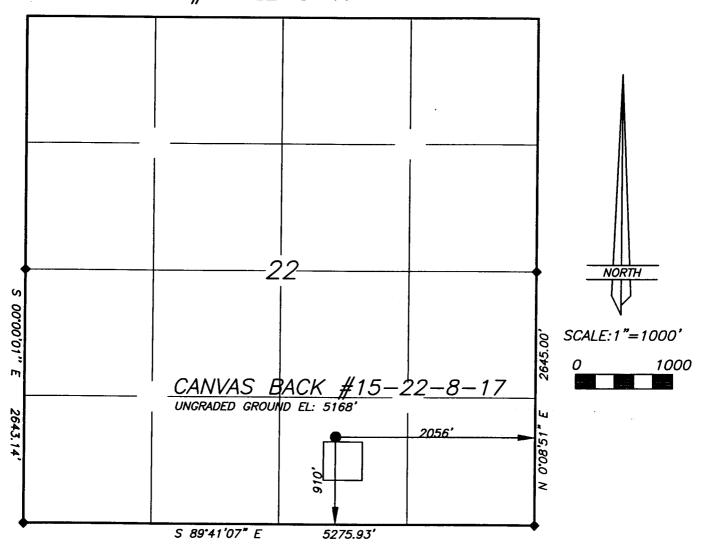
UNITED STATES
0 0 1 DEPARTMENT OF THE INTERIOF
BUREAU OF LAND MANAGEMENT

0 0 1 BUREAU OF LAND MANAGEMENT						5. LEASE DESIGNATION AND SERIAL NO.  UTU-77233			
APPLICATION FOR	PERMIT TO DE	RILL, DEEPEN, OI	R PLUG	BACK	6.	IF INDIAN, ALLOTTEE O	R TRIBE NAME		
Ia. TYPE OF WORK DRILL X DEEPEN						7. UNIT AGREEMENT NAME Canvasback Unit			
Ib. TYPE OF WELL  OIL GAS		SINGLE	MULTIPLE		ļ	FARM OR LEASE NAME			
WELL X WELL	OTHER	ZONE X	ZONE		1 l°		WELL NO		
2. NAME OF OPERATOR	OTHER _		120ME	<u> </u>	]	Canvasback			
					1 9.	API WELL NO. 15-22-8-17			
Inland Production Compa 3. ADDRESS OF OPERATOR	шу				- 17	), FIELD AND POOL OR W	II DOAT		
	0 D CO 90303	n	(202) 003	0103					
410 - 17th Street, Suite 70 4. LOCATION OF WELL (Report local			(303) 893	5-0102		Monument Butt	e		
At Surface SW/SE	2056' FEL 910' l		4428	989 N		. SEC., T., R., M., OR BLK. AND SURVEY OR AREA			
	2030 FEE 710 1	rbL	1120	011		W/SE			
At proposed Prod. Zone			586	074E	1 -		-		
14. DISTANCE IN MILES AND DIRECTIO	NI EDAM NEADEST TOWN OD D	UCT UEFICE*				ec. 22, T8S, R17E	L 13. STATE		
Approximately 11.66 mile						uchesne	UT		
		· 1		<u> </u>			101		
15. DISTANCE FROM PROPOSED* LOCA OR LEASE LINE, FT. (Also t		16. NO. OF ACRES IN LEASE		17. NO, OF ACRES	ASSIGNED TO	THIS WELL			
Approx. 910' f/lse line & 9		1202.78		40					
18. DISTANCE FROM PROPOSED LOCAT DRILLING, COMPLETED, OR APPLIE		19. PROPOSED DEPTH		20. ROTARY OR C	ABLE TOOLS				
Approx. 1403'	DIOR ON THIS BEASE, I'I	6500'		Rot	arv				
<b></b>		0500	· <del></del>	·	,	TE WORK WILL COLORS			
21. ELEVATIONS (Show whether DF, RT, G	K, ctc.)				22. APPROX. DATE WORK WILL START*				
5168' GR				i	3rd Quar	ter 2001			
23. PROPOSED CASING A	ND CEMENTING PROC	GRAM							
SIZE OF HOLE	SIZE OF CASING W	'EIGHT/FOOT	SETTING DEP	TH QUANTITY		CEMENT			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5.52 5. 6.6.6.		1001111100001		QUANTITY OF CEMENT				
Defends Manuscott Butto	Field CODIs Duilling	Pusana /Casina Dasis	<u> </u>	<del>-</del>					
Refer to Monument Butte	Fleid SOP's Drilling	Program/Casing Desig	gn						
			<u> </u>						
	Company proposes to	o drill this well in accor	dance wit	h the attache	ed exhibi	MAR 2	6 200 <sub>1</sub>		
N ABOVE SPACE DESCRIBE PROPO	SED PROGRAM: If proposal	is to deepen or plug back, give data	a on present pro	ductive zone and pr	roposed new pro	ductive zone.			
f proposal is to drill or deepen directions	ally, give pertinent data on subs	urface locations and measured and t	true vertical dep	ths. Give blowout	preventer progr	am, if any			

# INLAND PRODUCTION COMPANY WELL LOCATION PLAT

LOCATED IN THE SW1/4 OF THE SE1/4 OF SECTION 22, TBS, R17E, S.L.B.&M.

CANVAS BACK #15-22-8-17



#### LEGEND AND NOTES

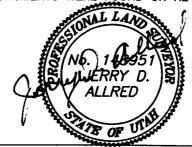
♦ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY.

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS, AS WAS THE U.S.G.S. MAP.

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT. THE BEARINGS ARE BASED ON WGS84 DATUM.

#### SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY PERFORMED BY ME, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR RE-ESTABLISHED.



JERRY D. ALLRED, PROFESSIONAL LAND SURVEYOR, CERTIFICATE NO. 148951, STATE OF UTAH



JERRY D. ALLRED & ASSOCIATES SURVEYING CONSULTANTS

121 NORTH CENTER ST.—P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5357

REV 17 MAR 2001 12 MAR 2001

84-121-081

### Memorandum of Surface Use Agreement

#### KNOW ALL MEN BY THESE PRESENTS:

That the Brad and JoAnn Nelson Family Trust and the Ethan Lee and Louise Nelson Family Trust, both of P.O. Box 638, Roosevelt, Utah 84052, hereinafter called "Owners," and Inland Production Company, of 410 17th Street, Suite 700, Denver, Colorado 80202, hereinafter called "Inland," have executed a Wellsite Surface and Damage Agreement and an Easement and Right-of-Way, dated December 2, 2002, hereinafter referred to as "Agreement." That Agreement grants Inland certain rights to enter upon and utilize the surface as described below. The terms of which the parties agree as follows:

Inland owns or controls rights and interests in United States Oil and Gas Leas UTU-77233, which covers the following described lands situated in Duchesne County, Utah:

Township 8 South, Range 17 East, SLM Section 22: SE/4 SW/4 and S/2 SE/4

By virtue of the Agreement referenced above, Owners and Inland have reached an understanding in settlement of disputes on all claims for use of the surface and damage to crops and interruption or interference with agricultural improvements arising from Inland's drilling, completion and production activities and operations for wells, and have also agreed to the measure of settlement for continuing and additional operations by Inland in the area on surface owned or controlled by Owners.

The Agreement shall remain in effect for so long as the drilling, production and development activities continue and all payments and conditions pursuant thereto have been timely paid and honored or terminated by mutual agreement between Owners and Inland. Said Agreement contains terms and provisions other than those herein stated. Executed copies of said Agreement, which sets forth the precise terms thereof, are in the files of the Owners and Inland.

This document is filed to secure all rights, which are accorded through notice as if the Agreement itself had been recorded.

Executed this 12th day of December 2002.

INLAND PRODUCTION COMPANY

Attorney-in-Fact

CORPORATE ACKNOWLEDGEMENT

STATE OF COLORADO

)ss.

CITY AND COUNTY OF DENVER

On this 12<sup>st</sup> Day of December 2002, before me, the undersigned Notary Public in and for the County and State aforesaid, personally appeared Jeff Fandrich, to me known to be the identical person who signed the name and maker thereof to the within and foregoing instrument as its Attorney-in-Fact and acknowledged to me that he executed the same a his free and voluntary act and deed, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

My Commission Expires: 8/29/05

Notary Public

# INLAND PRODUCTION COMPANY CANVASBACK #15-22-8-17 SW/SE SECTION 22, T8S, R17E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### DRILLING PROGRAM

#### 1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

#### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta 0' - 1640' Green River 1640' Wasatch 6500'

#### 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 1640' - 6500' - Oil

#### 4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "F".

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

#### 7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

#### 8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered.

#### 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

# INLAND PRODUCTION COMPANY CANVASBACK #15-22-8-17 SW/SE SECTION 22, T8S, R17E DUCHESNE COUNTY, UTAH

#### **ONSHORE ORDER NO. 1**

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Inland Production Company well location site Canvasback # 15-22-8-17 located in the SW 1/4 SE 1/4 Section 22, T8S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southerly along Hwy 53 - 6.8 miles to the junction of an existing paved road to the east. Proceed easterly along this road 2.5 miles to the junction of an existing paved road to the east. Proceed south easterly along this road 0.8 miles to the beginning of the proposed access road of the Canvasback 15-22-8-17.

#### 2. PLANNED ACCESS ROAD

Please refer to Monument Butte Field Standard Operating Procedure (SOP). See Topographic Map "B" for the location of the proposed access road.

#### 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "D".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "C".

#### 6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

#### 8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

#### 9. WELL SITE LAYOUT

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, pipe racks, trailer parking, spoil dirt stockpile(s), and Surface material stockpile(s).

#### 10. PLANS FOR RESTORATION OF SURFACE

LandOwner has requested that the well pad be left as is with no rehabilitation after plugging the well.

11. SURFACE OWNERSHIP – Brad Nelson.

#### 12. OTHER ADDITIONAL INFORMATION

The Paleontological Resource Survey and Archeological Survey have been waived by the landowner. Refer to Exhibit "G".

#### 13. <u>LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION</u>

#### Representative

Name:

Brad Mecham

Address:

Route #3 Box 3630

Myton, Utah 84052

Telephone:

(435) 646-3721

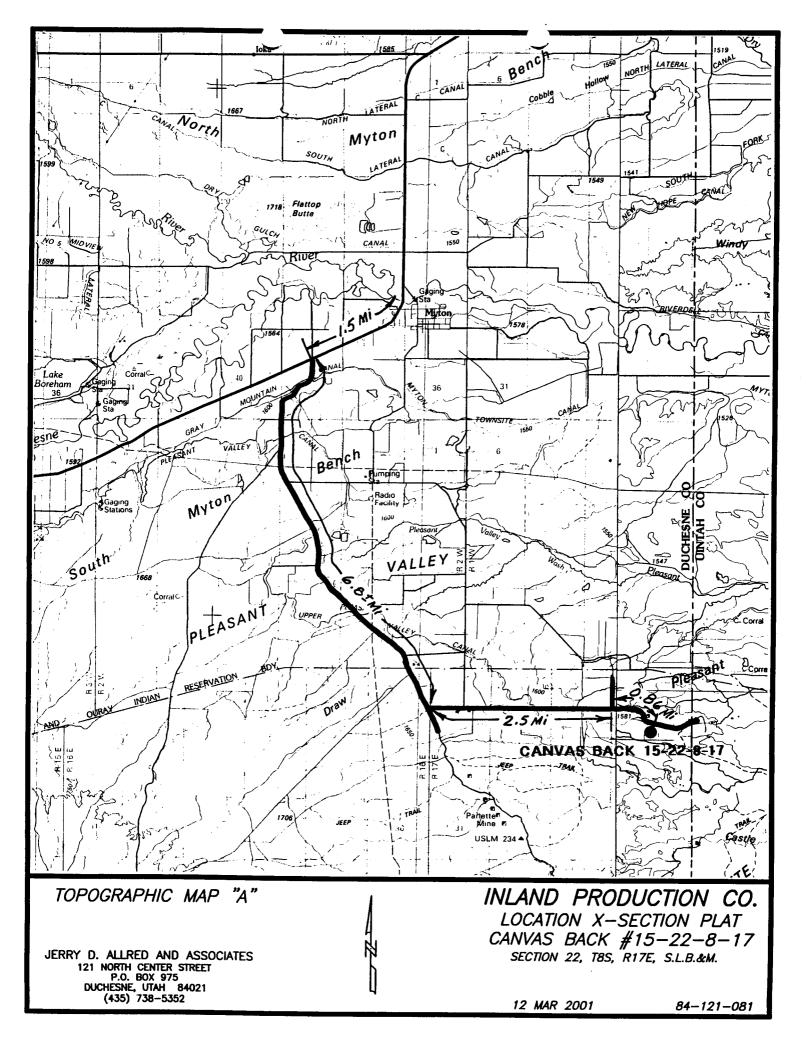
#### Certification

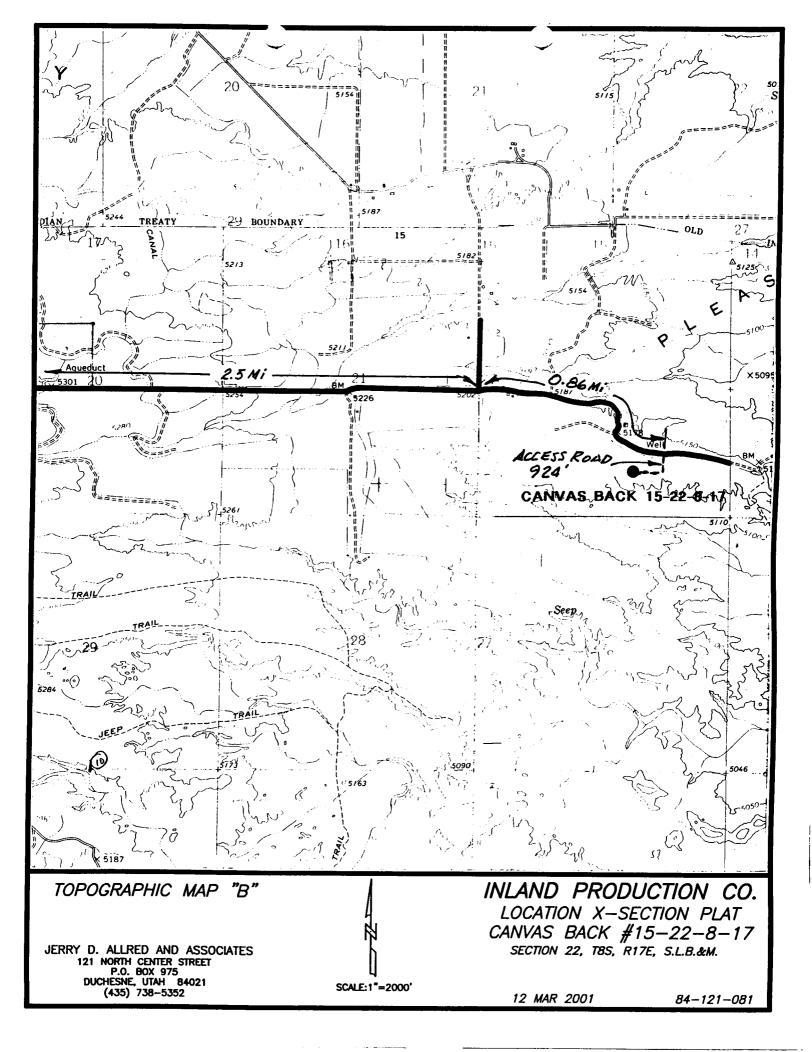
Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #15-22-8-17 SW/SE Section 22, Township 8S, Range 17E: Lease UTU-77233 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

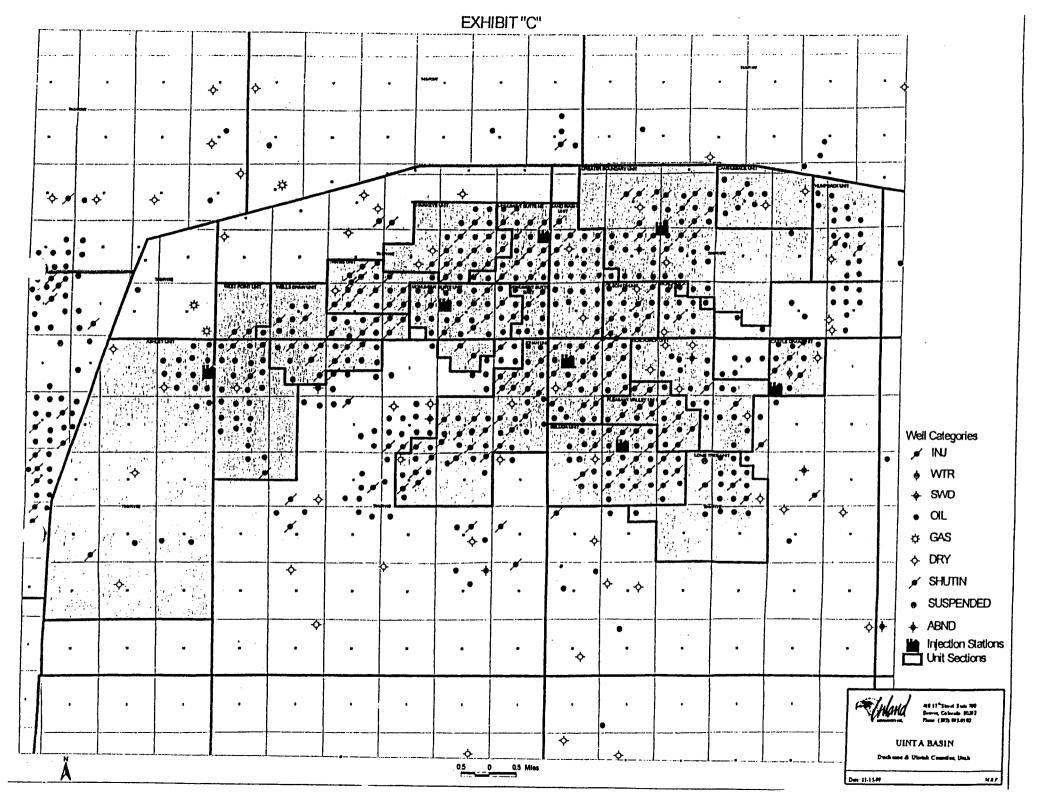
I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

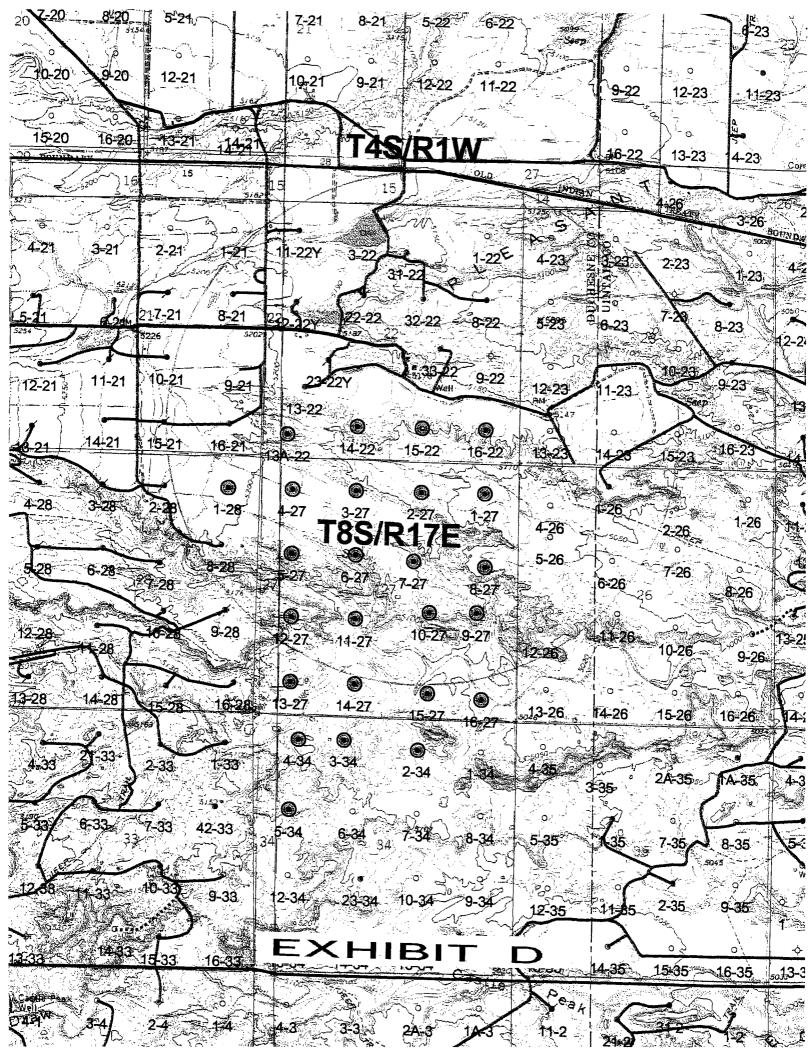
Date

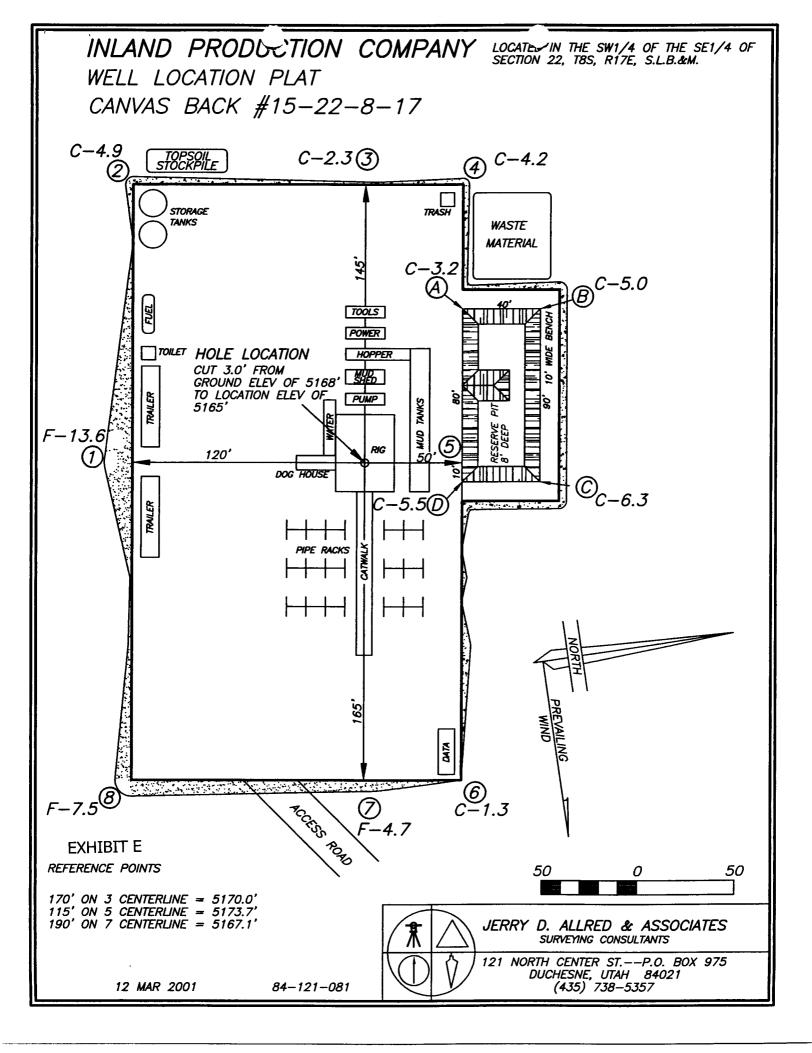
Brad Mecham
Operations Manager

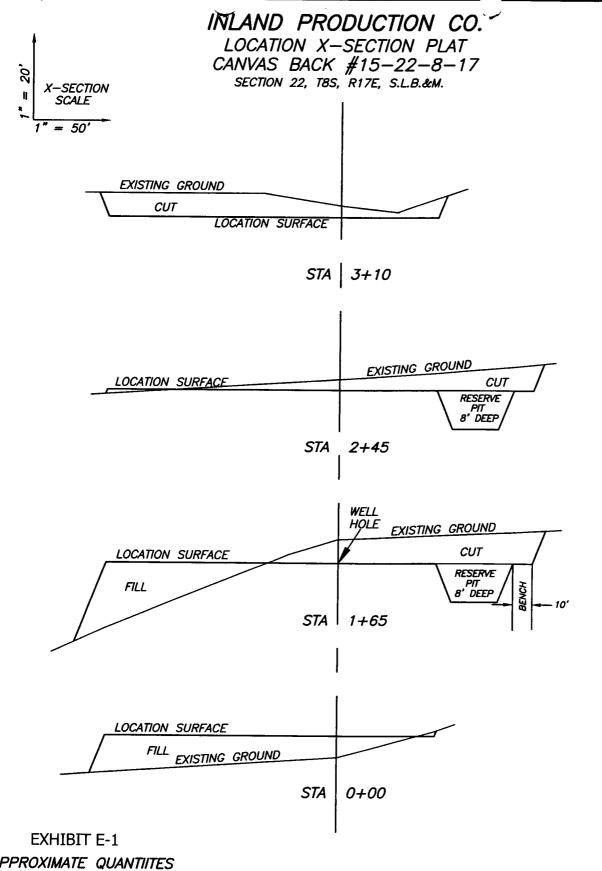












# APPROXIMATE QUANTIITES

CUT: 4340 CU. YDS. (LOCATION) CUT: 700 CU. YDS. (PIT) FILL: 3600 CU. YDS.

JERRY D. ALLRED AND ASSOCIATES 121 NORTH CENTER STREET P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738-5352

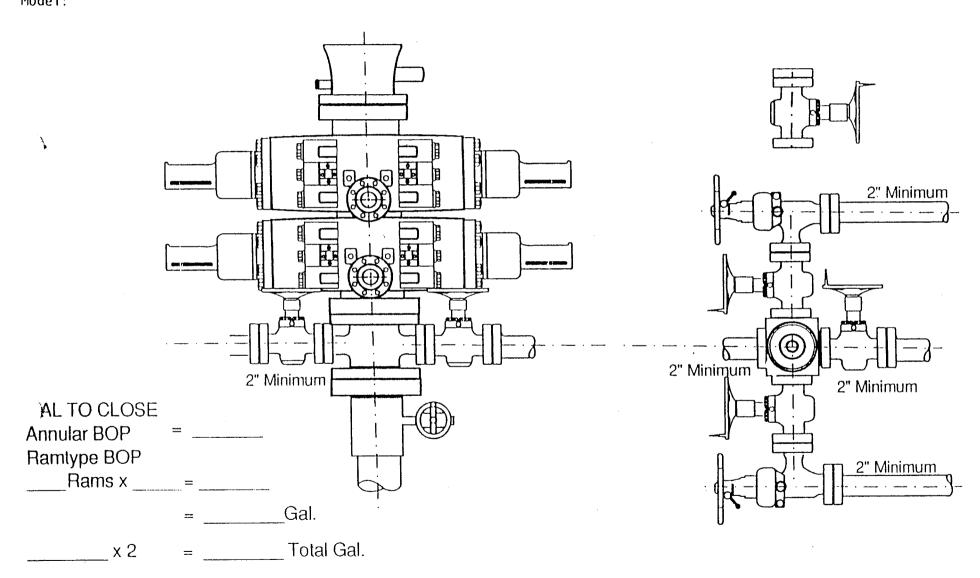
12 MAR 2001

84-121-081

# 2-M SYSTEM

RAM TYPE B.O.P. Make:

Make: Size: Model:



Rounding off to the next higher increment of 10 gal. would require

Gal. (total fluid & nitro volume)

**EXHIBIT F** 

#### **EXHIBIT G**

Canvasback 15-22-8-17 SW/SE Sec. 22, T8S, R17E Lease #UTU-77233

# **ARCHAEOLOGICAL REPORT WAIVER**

For the above referenced location; Brad Nelson, the Private Surface Owner. (Having a Surface Owner Agreement with Inland Production Company) Brad Nelson, representing this entity does agree to waive the request from the Bureau of Land Management for an Archaeological/Cultural Survey. This waiver hereby releases Inland Production Company from this request.

Brad Nelson Date

**Private Surface Owner** 

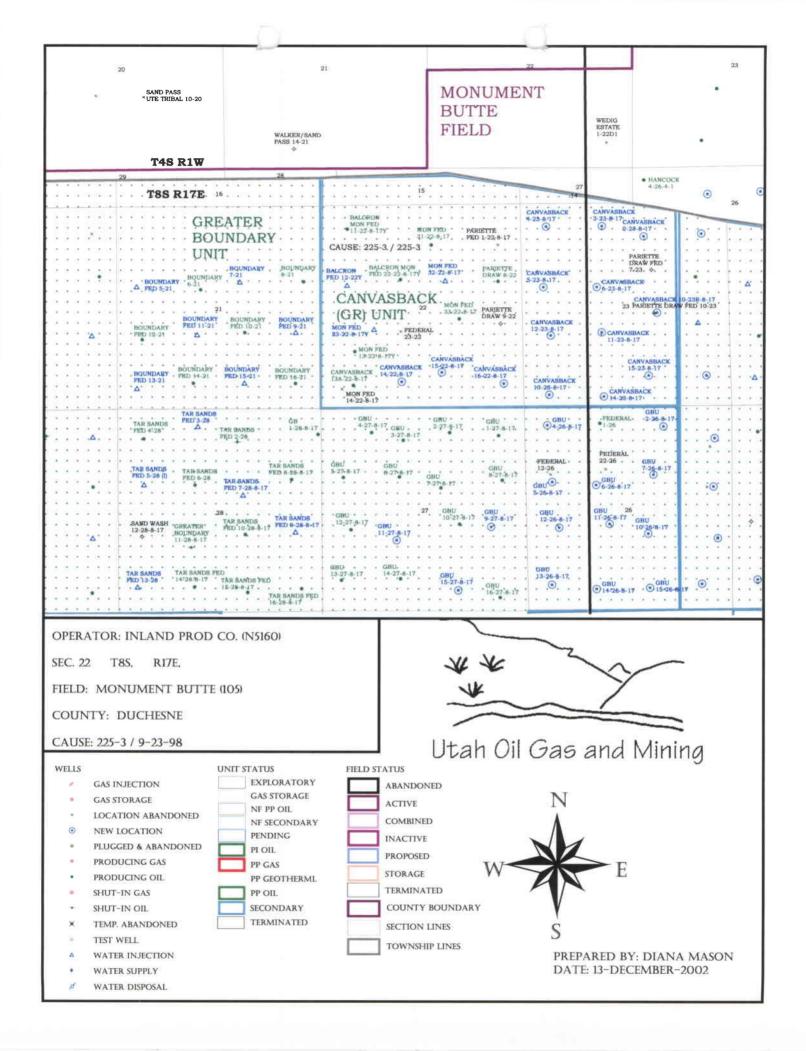
Brad Mecham

Date

**Inland Production Company** 

# APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	03/26/2001	API NO. ASSIGNED: 43-013-32240							
OPERATOR: II	ANVASBACK 15-22-8-17 NLAND PRODUCTION ( N5160 ) RAD MECHAM	PHONE NUMBER: 30	03-893-0102						
PROPOSED LOCAT	TION:	INSPECT LOCATN BY: / /							
<del>-</del>	080S 170E 0910 FSL 2056 FEL	Tech Review	Initials	Date					
BOTTOM: DUCHESNE	E	Engineering							
MONUMENT B		Geology							
LEASE TYPE:	1-Federal	Surface							
LEASE NUMBER: SURFACE OWNER									
PROPOSED FORM									
(No. 44  N Potash  N Oil Shall  Water Per  (No. MU  N RDCC Rev  (Date:	ed[] Ind[] Sta[] Fee[] 188944 ) (Y/N) le (Y/N) *190-5 (B) or 190-3	LOCATION AND SITING:  R649-2-3. Unit CANVASBACK (GR)  R649-3-2. General  Siting: 460 From Qtr/Qtr & 920' Between Wells  R649-3-3. Exception  Drilling Unit  Board Cause No: 235-3 *Unit & Enh. Rec  Eff Date: 9-23-98  Siting: Status fulls Susfunded  R649-3-11. Directional Drill							
COMMENTS:  STIPULATIONS:	Hud Presite (4-4-01)  Mon Butte Fuld Sol, separa  1- STATEMENT 2  2. FEDERAL APPROX								
	L' FEBERAL APPROV	AL							



# DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

Operator Name: Inland Production Company
Name & Number: Canvas Back #15-22-8-17
<b>API Number:</b> 43-013-32240
Location: 1/4,1/4 SW/SE Sec. 22 T. 08S R. 17E
Geology/Ground Water:
Inland has proposed setting 300' of surface casing at this location. The depth to the base of the moderately
saline ground water is estimated to be at around 200'. A search of Division of Water Rights records indicates
that 6 water wells are located within a 10,000 foot radius of the center of Section 22. Of these wells 5 are
listed as being used for domestic and stock watering. No depths are listed for these wells. The proposed
surface casing should extend below the base of the moderately saline water. The other well is a deep water
supply well for Inland. The surface formation at this location is the Uinta Formation. The Uinta Formation is
made up of interbedded sandstones and shales. The Sandstones are of a discontinuous nature and probably
don't represent a significant aquifer. The existing casing should adequately protect any useable ground water.
Reviewer: Brad Hill
Date: 04/10/2001
Surface:
An onsite investigation of the surface area was done on 04/04/01 with Brad Mecham to address and observe
any issues regarding any particular needs this well site and access road might have. Mr. Brad Nelson (the
landowner of record) was invited by DOGM staff to attend the onsite meeting but declined. The access road
proposed by Inland runs adjacent to and immediately south of an irrigated alfalfa field. A dry drainage is
present at west end of location with tamarisk and wetland vegetation. However, Inland believes all the water is
presently moving east and remaining in field when irrigated. Inland shall berm the location and install any
diversion necessary if irrigation waters cause erosion of access road or location. Furthermore, this location is
outside the window of tolerance (by 50') for state spacing orders. Inland Representative says this well site was
moved north to keep the rig's substructure in cut rather than fill, which appears justified on the cut sheet.
Devience. Demais I. Income
Reviewer: Dennis L. Ingram
Date: April 10, 2001

# **Conditions of Approval/Application for Permit to Drill:**

1. The operator shall properly install and maintain a 12 mil or thicker synthetic liner in reserve pit to prevent seepage of drilling fluids into shallow ground water.

# ON-SITE PREDRILL EVALUATION

# Division of Oil, Gas and Mining

OPERATOR: Inland Production Company
WELL NAME & NUMBER: Canvas Back #15-22-8-16
API NUMBER: 43-013-32240  LEASE: FEE FIELD/UNIT: MONUMENT BUTTE/CANVASBACK
LOCATION: 1/4,1/4 SW/SE Sec: 22 TWP: 08S RNG: 17E 2056' FEL 910' FSL GPS COORD (UTM): 12 586047E; 4439199N SURFACE OWNER: Brad Nelson
BIRG NEISON
<u>PARTICIPANTS</u> <u>Dennis L. Ingram (DOGM); Brad Mecham (Inland Production Company)</u>
REGIONAL/LOCAL SETTING & TOPOGRAPHY  Proposed immediately south of irrigated alfalfa field on southern edge of tabletop landscape, overlooking the head (or beginnings) of Big Wash Drainage system in Pleasant Valley approximately 10.3 miles south of Myton, Utah
SURFACE USE PLAN
CURRENT SURFACE USE: <u>Undeveloped rangeland used for wildlife and grazing</u>
PROPOSED SURFACE DISTURBANCE: Proposed 924' of new access road in from east with a location measuring 300'x 170'
LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: <u>See attached map from GIS data base</u>
LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production Facilities shall remain on location; gas residue and sales line of flex pipe on surface along right-of-way.
SOURCE OF CONSTRUCTION MATERIAL: Native cut and fill, borrowed
ANCILLARY FACILITIES: None
WASTE MANAGEMENT PLAN: Attached and submitted to DOGM with Application to Drill. ENVIRONMENTAL PARAMETERS
AFFECTED FLOODPLAINS AND/OR WETLANDS: None
FLORA/FAUNA: Shadscale, native grass, salt grass, rabbit brush, sage brush, tamarisk, prickly-pear cactus; mule deer, elk, mountain lion, coyote, raccoon, fox, small birds, birds of prey and other small animals typical of the region.
SOIL TYPE AND CHARACTERISTICS: Tan to light brown fine grained sandy Loam with some clays present.
SURFACE FORMATION & CHARACTERISTICS: <u>Uinta Formation of the Upper</u> <u>Eocene Age</u>
EROSION/SEDIMENTATION/STABILITY: Minor erosion, some sedimentation,

no stability problems anticipated
PALEONTOLOGICAL POTENTIAL: None observed during onsite meeting
RESERVE PIT
CHARACTERISTICS: Located on north side in cut and parallel with prevailing winds measuring 40'x 90'x 8' deep.
LINER REQUIREMENTS (Site Ranking Form attached): 35 points
SURFACE RESTORATION/RECLAMATION PLAN
According to Landowner agreement
SURFACE AGREEMENT: Yes
CULTURAL RESOURCES/ARCHAEOLOGY: Inland submitted Arch report Waiver from Mr. Brad Nelson, releasing them from survey obligations

#### OTHER OBSERVATIONS/COMMENTS

Access road enters location from the east and immediately south of irrigated alfalfa field with narrow draw which extend south into Big Wash Drainage System. Water from irrigated field appears to drain east and adjacent to location. Old draws are dry but did at one time have water seeps down them, according to surface vegetation. Location was moved north out of window of tolerance to find a stable pad for drill rig, according to operator representative. The cut and fill sheet, plus visual inspection, seems to support their request to move said week because of that reason.

#### ATTACHMENTS:

Photos of surface area before disturbance

Dennis L. Ingram
DOGM REPRESENTATIVE

04/04/01 10:35 AM DATE/TIME

# Evaluation Ranking Criteria and Ranking Score For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors		Ranking	<u>Site Ranking</u>
Distance to Groundwater (feet)			
>200 100 to 200	0 5		
75 to 100	10		
25 to 75 <25 or recharge area	15 20		1.0
_	20		10
Distance to Surf. Water (feet) >1000	0		
300 to 1000	2		
200 to 300 100 to 200	10 15		
< 100	20		0
Distance to Nearest Municipal Well	(feet)		
>5280 1320 to 5280	0 5		
500 to 1320	10		
<500	15		0
Distance to Other Wells (feet)			
>1320 300 to 1320	0 10		
<300	20		_Unknown
Native Soil Type			
Low permeability	0		
Mod. permeability High permeability	10 20		10
•	20		10
Fluid Type Air/mist	0		
Fresh Water	5		
TDS >5000 and <10000 TDS >10000 or Oil Base	15 20		
Mud Fluid containing high			
levels of hazardous constituer	its		15
Drill Cuttings			
Normal Rock Salt or detrimental	0 10		0
	10		
Annual Precipitation (inches) <10	0		
10 to 20	5		
>20	10		0
Affected Populations			
<10 10 to 30	0 6		
30 to 50	8		
>50	10		0
Presence of Nearby Utility Conduits			
Not Present	0		
Unknown Present	10 15		_Unknown
	10		OHAHOWII
Final Score (Level II Sensitivity)			35 points











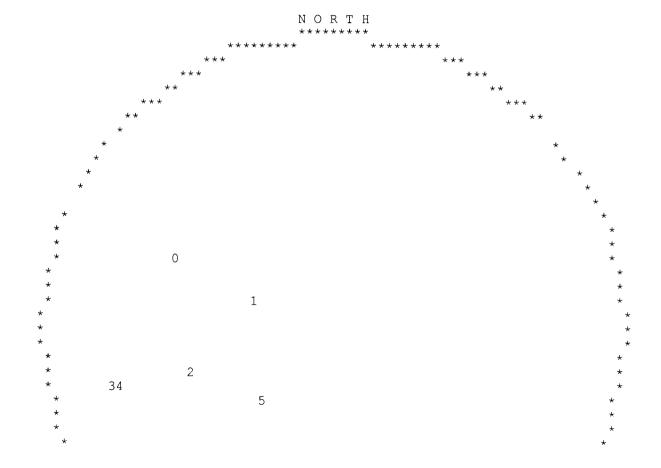


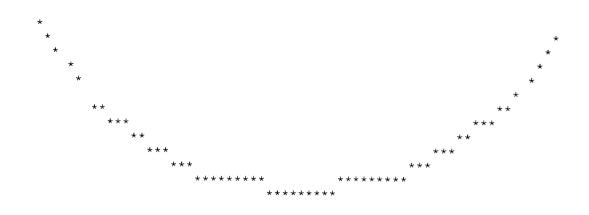


UTAH DIVISION OF WATER RIGHTS
WATER RIGHT POINT OF DIVERSION PLOT CREATED TUE, APR 10, 2001, 3:30 PM
PLOT SHOWS LOCATION OF 6 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 10000 FEET FROM A POINT FEET, FEET OF THE CT CORNER, SECTION 22 TOWNSHIP 8S RANGE 17E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 4000 FEET





# UTAH DIVISION OF WATER RIGHTS NWPLAT POINT OF DIVERSION LOCATION PROGRAM

MAP CHAI	WATER R RIGHT	£	AC-FT	SOURCE DES	CRIPTIC			NORTH	POINT	OF DI AST	VERSI CNR		ESCRIP:	rion RNG	B&M
0	47 1501	.0150 WATER USE(S): IRRIGATI Abegglen, Clark and Ar	ON DOMES	Underground STIC STOCKWA		Well		S	50 W	50		21 RITY yton	8S DATE:	17E 09/05	~
1	47 1346	.0150 WATER USE(S): DOMESTIC Roberts, Louis Clark		Underground	Water	Well	;	S 17	30 W	100	PRIO	21 RITY yton	8S DATE:	17E 03/18	~ —
2	47 1341	.0150 WATER USE(S): DOMESTIC Roberts, Dean D.				Well : 400 No:		N 13	50 W	2230	PRIO	21 RITY armin	4S DATE: ngton	1W 10/18	US /195
3	47 1335	.0150 WATER USE(S): DOMESTIC Roberts, Howard D.		Underground	Water	Well	\$	S 20	50 E	470	PRIO	21 RITY yton	4S DATE:	1W 08/07	US /194
4	47 1805	.0460	.00	8	0 - 4	1990	1	N 5	15 E	517	SW	21	8S	17E	SL

WATER USE(S): OTHER
Inland Production Company

410 17th Street, Suite 700

PRIORITY DATE: 05/31/199

Denver

5 47 1336 .0150

WATER USE(S): DOMESTIC

Jorgensen, Andrew M.

.00 Underground Water Well

N 80 E 340 SW 22

SW 22 4S 1W US PRIORITY DATE: 03/10/194

Myton

# 004 United States Department of the Interior

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 30, 2001

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2001 Plan of Development Canvasback Unit,

Duchesne County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following wells are planned for calendar year 2001 within the Canvasback Unit, Duchesne County, Utah.

API # WELL NAME LOCATION

(Proposed PZ Grrv)

 43-013-32238
 13A-22-8-17
 Sec. 22, T8S, R17E
 0565 FSL 0822 FWL

 43-013-32239
 14-22-8-17
 Sec. 22, T8S, R17E
 0664 FSL 2067 FWL

 43-013-32240
 15-22-8-17
 Sec. 22, T8S, R17E
 0910 FSL 2056 FEL

 43-013-32241
 16-22-8-17
 Sec. 22, T8S, R17E
 0624 FSL 0465 FEL

This office has no has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Canvasback Unit

Division of Oil Gas and Mining

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:3-30-1

**Jon D. Heist & Associates. LLC** 

2507 Flintridge Place Ft. Collins, CO 80521 Phone: 970-481-1202 Fax: 707-313-3778 jondholst@yahoo.com

May 1, 2001

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
ATTN: Lisha Cordova
P.O. Box 145801
Salt Lake City, UT 84114-5801

RE: Exceptional Spacing for Canvasback 15-22-8-17 Well Location

Dear Lisha:

Please note that the 15-22-8-17 well location will require exceptional spacing due to topographic constraints. The proposed well location has been moved further north into the existing Canvasback Unit and will be 910 feet from the nearest lease or unit boundary, therefore, it will not require written consent from adjacent lease or unit interest owners as required under Rule 649-3-3.

If you have any additional questions or require additional information regarding the location of this proposed well, please contact me at (970) 481-1202.

Respectfully,

Jon D. Holst

AEC



#### INLAND PRODUCTION COMPANY

410 17th Street, Suite 700 Denver, CO 80202 303-893-0102 Fax #303-893-0103

Date:

December 12, 2002

To:

Lisha Cordova

State of Utah, Division of Oil, Gas & Mining

Phone: Fax:

801-538-5296 801-359-3940

From:

Jeff Fandrich

Phone:

303-382-4422

Fax:

303-893-0103

Pages (incl. cover sheet):

Three (3)

Subject:

APDs for the Canvasback 14-22, 15-22, 16-22, 13-23, and 14-23 wells

Attached are two Memorandums of Surface Agreements covering the captioned APDs which have been previously submitted to your office. We have submitted the originals for recording in the respective counties. Please notify us if there is anything further needed to approve the APDs.

Thanks for your assistance. Happy Holidays!

If you do not receive all pages or there is a problem with this transmission, please call sender. This message and all attachments may contain privileged and/or confidential information. If you are not the intended recipient(s), or the employee or agent responsible for delivery of this message and attachments to the intended recipient(s), you are hereby notified that any dissemination, distribution or copying of this message is strictly prohibited. If you have received this message in error, please immediately notify the sender and return all copies via regular mail to the above address.

cc: Roosevelt-Mandie Crozier Jon Holst

**RECEIVED** 

DEC 1 2 2002

DIV. OF OIL, GAS & MINING



Michael O. Leavitt Governor Robert L. Morgan Executive Director Lowell P. Braxton Division Director

PO Box 145801 Salt Lake City, Utah 84114-5801 (801) 538-5340 telephone (801) 359-3940 fax (801) 538-7223 TTY www.nr.utah.gov

December 16, 2002

Inland Production Company 410 - 17th Street, Suite 700 Denver, UT 80202

Re:

Canvasback 15-22-8-17 Well, 910' FSL, 2056' FEL, SW SE, Sec. 22, T. 8 South,

R. 17 East, Duchesne County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-32240.

Sincerely

John R. Baza
Associate Director

Mil Heint

pb

**Enclosures** 

cc:

**Duchesne County Assessor** 

Bureau of Land Management, Vernal District Office



Operator:	Inland	Inland Production Company						
Well Name & Number_	Canv	Canvasback 15-22-8-17						
API Number:	43-0	43-013-32240						
Lease:	UTU	UTU-77233						
Location: <u>SW SE</u>	Sec22_	T. 8 South	<b>R.</b> 17 East					

### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

24.

SIGNED

PERMIT NO.

CONDITIONS OF APPROVAL. IF ANY:

#### SUBMIT IN TRIPLICATE\* (Other instructions on

reverse side)

**UNITED STATES** 

DEPARTMENT OF THE INTERIOR

"in approved. dget Bureau No. 1004-0136 Expires December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.

0 1 6 BUREAU OF LAND MANAGEMENT					3. LEASE DESIGNATION AND SERIAL NO. UTU-77233				
APPLICATION FO	OR PERMIT TO	DRIL	.L, DEEPEN, OF	RPLUG	BACK		6. IF INDIAN, ALLOTT	EE OR TRIB	BE NAME
1a TYPE OF WORK DRILL X DEEPEN							7. UNIT AGREEMENT NAME Canvasback Unit		
OIL GAS	S		SINGLE	MULTIPLE			8. FARM OR LEASE NA	ME WELL	NO
WELL X WE	LL OTHER		ZONE X	ZONE		]	Canvasbac	ek	
2. NAME OF OPERATOR							9. API WELL NO.	_	
Inland Production Con	npany						15-22-8-1		ή
410 - 17th Street, Suite	700 Denver, CO 800	202	Phone:	(303) 893	3-0102		Monument B		
4. LOCATION OF WELL (Report				(202) 021	· · · · · · · · · · · · · · · · · · ·		11. SEC., T., R., M., OR I		
At Surface SW/SE	2056' FEL 91	0' FSI					AND SURVEY OR AR	.EA	
At proposed Prod. Zone			12	N12 -	22246		SW/SE	4.50	
14. DISTANCE IN MILES AND DIREC	CTION EROM NEAREST TOWN (	TPOST	OFFICE: 43.	UL2'1	32240		Sec. 22, T8S, R		3. STATE
Approximately 11.66 n							Duchesne	•	J <b>T</b>
15. DISTANCE FROM PROPOSED* L OR LEASE LINE, FT.(Also t			16. NO. OF ACRES IN LEASE		17, NO, OF ACRE	S ASSIGNED T	O THIS WELL	· ·	
Approx. 910' f/lse line	& 910' f/unit line		1202.78		40				
18. DISTANCE FROM PROPOSED LO DRILLING, COMPLETED, OR API			19. PROPOSED DEPTH		20. ROTARY OR O	CABLE TOOLS			
Approx. 1403'	I BIED TOR ON THIS ELASE, TT.		6500'		Rot	tary			
21. ELEVATIONS (Show whether DF, I	RT, GR, etc.)		·L	<del></del>	·	22. APPROX.	DATE WORK WILL STA	RT*	······
5168' GR						3rd Qua	rter 2001		
23. PROPOSED CASIN	G AND CEMENTING PR	OGRA	M						
SIZE OF HOLE	SIZE OF CASING	WEIGH	I/F001	SETTING DEF	тн	QUANTITY	OF CEMENT		
Refer to Monument Bu	tte Field SOP's Drill	ing Pr	ogram/Casing Desig	n		<u> </u>			······································
Telef to Monament Bu		<u> </u>	og onog 2 to.g.						· · · · · · · · · · · · · · · · · · ·
	on Company propose of Approval are also		rill this well in accord	dance wit	h the attach	ied exhib	its.		
									DENIED
									₹ 2 6 2001
								1117-11	\ \L 0 \ZUU
									RECEIVED
									JAN 0 3 2003
									DIV. OF OIL, GAS & MININ

\*See Instructions On Reverse Side

**Operations Manager** 

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

COAs Page 1 of 2 Well No.: Canvasback 15-22-8-17

# CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator: Inland Production Company
•
Well Name & Number: Canvasback 15-22-8-17
API Number: <u>43-013-32240</u>
Lease Number: <u>U-77233</u>
Location: SWSE Sec. 22 T.8S R.17E
Agreement: Canvasback Unit

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

#### **CONDITIONS OF APPROVAL**

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

#### 1. Other Information

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Ed Forsman

(435) 828-7874 (CELL)

Petroleum Engineer

Kirk Fleetwood

(435) 828-7875 (CELL)

Petroleum Engineer

BLM FAX Machine (4)

(435) 781-4410

COAs Page 2 of 2

Well No.: Canvasback 15-22-8-17

### SURFACE USE PROGRAM Conditions of Approval (COA) Inland Production Company - Well No. 15-22-9-17 & 16-22-9-17

## Plans For Reclamation of Location:

All seeding for reclamation operations at this location shall use the following seed mixture:

shadscale	Atriplex confertifolia Atriplex gardneri	3 lbs/acre 3 lbs/acre
Gardners salt bush galleta grass	Hilaria jamesii	3 lbs/acre
mat salt bush	Atriplex corrugata	3 lbs/acre

If the seed mixture is to be aerially broadcasted, the pounds per acre shall be doubled. All seed poundages are in Pure Live Seed.

Immediately after construction the stockpiled top soil will be seeded and the seed worked into the soil by "walking" the pile with caterpillar tracks.

# DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Company:	INLAND PROI	INLAND PRODUCTION COMPANY								
Well Name:	CANVASBACI	K 15-22-8-17								
Api No: 43-013-322	Lease	D Lease Type: FED-MIN, FEE-SURF								
Section 22 Townsh	nip 08S Range_	17E County_	DUCHESNE							
Drilling Contractor	STUBBS DRILLING	<u> RI</u>	G# <u>111</u>							
Time	02/21/03 6:00 AM DRY									
Reported by		· · · · -								
Telephone #	1-435-823-7468									
Date 02/26/2003	Signed:	CHD								

# INLAND PRODUCTI \_\_ COMPANY - CASING & CEMEN' \_ EPORT

009

			8 5/8	CASING SET	AT	311.23				
LAST CASING	S 8 5/8"	SET A	T		OPERATOR		Inland Pro	duction Cor	npany	
DATUM 1					WELL	Canvasba	ck 14-22-8-	17		
DATUM TO C		SING			FIELD/PROS	SPECT	Monument	Butte		
DATUM TO B	RADENHEA	AD FLANGE			CONTRACT	OR & RIG#		Stubbs # 11	11	
TD DRILLER	305	LOGGE	R							
HOLE SIZE	12 1/4									
LOG OF CAS	ING STRING	G·								
PIECES	OD		MAKE - DESCF	RIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH	
112020										
				· · · · · · · · · · · · · · · · · · ·	; 					
		40.0 sh jt' sh	it	<del></del>						
		WHI - 92 csg					8rd	Α	0.95	
7	8 5/8"	Maverick ST			24#	J-55	8rd	Α	299.38	
	****			shoe			8rd	Α	0.9	
CASING INVENTORY BAL.			FEET	JTS	TOTAL LEN	301.23				
TOTAL LENG	TH OF STE	RING	301.23	7	LESS CUT	2				
LESS NON C	SG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG  CASING SET DEPTH RECEIVED  FEB 2 6 2003					
PLUS FULL	ITS. LEFT C	DUT	0							
	TOTAL		291.99	7						
TOTAL CSG.	DEL. (W/O	THRDS)	291.99	7	COMPARE DIV. OF OIL, GAS & MINING					
TIMING			1ST STAGE			DIV.	OF OIL, GAS	α WIIIAIIAO		
BEGIN RUN	CSG.		SPUD	02/19/2003	GOOD CIRC THRU JOB Yes					
CSG. IN HOL	.E	<u></u> -		10:30am	Bbls CMT C	IRC TO SU	RFACE	4		
BEGIN CIRC					RECIPROCATED PIPE FORTHRUFT STROK					
BEGIN PUMI	P CMT				DID BACK	PRES. VALV	/E HOLD ?	N/A		
BEGIN DSPL	CMT				BUMPED P	LUG TO _		200	)PSI	
PLUG DOWN	١		Cemented	02/22/2003	ļ <u></u>					
CEMENT US	ED	ļ		CEMENT CO	MPANY-	B. J.		·		
STAGE	# SX			CEMENT TY	PE & ADDITI	VES		<u>_</u>		
1	150	Class "G" w	/ 2% CaCL2 +	1/4#/sk Cello-	Flake mixed	@ 15.8 ppg	1.17 cf/sk yie	eld		
					<del> </del>		<del></del>			
		<u> </u>		τ					· · · · · · · · · · · · · · · · · · ·	
		TCHER PLA	******************			SHOW MA	KE & SPACI	NG	<del> </del>	
Centralizers	s - Middle f	irst, top seco	ond & third for	. 3						
						····				

COMPANY REPRESENTATIVE Pat Wisener

Do not use this form for p	DEPARTMEN  BUREAU OF 1  DRY NOTICES ANI  proposals to drill or to dee	TED STATES  NT OF THE INTERIOR  LAND MANAGEMENT  D REPORTS ON WELLS  pen or reentry a different reservoir.  OR PERMIT -" for such proposals	FORM APPROVED  Budget Bureau No. 1004-0135  Expires: March 31, 1993  5. Lease Designation and Serial No.  UTU-77233  6. If Indian, Allottee or Tribe Name  NA
	as	TRIPLICATE	7. If Unit or CA, Agreement Designation  Canvasback  8. Well Name and No.
2. Name of Operator INLAND PRODUC 3. Address and Telephone No.	CTION COMPANY		15-22-8-17  9. API Well No. 43-013-32240  10. Field and Pool, or Exploratory Area
Rt. 3 Box 3630, My  4. Location of Well (Footage, Sec.,  2056' FEL & 910' F		Duchesne, Utah	
12. CHECK	APPROPRIATE BOX(s) BMISSION	TO INDICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA E OF ACTION
No	otice of Intent	Abandonment Recompletion	Change of Plans New Construction

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Casing Repair

Altering Casing

Subsequent Report

Final Abandonment Notice

On 2-21-03. MIRU Stubbs # 111. Drill 305' of 12 1/4" hole with air mist. TIH w/ 7 Jt's 85/8" J-55 24# csgn. Set @ 310.08'/KB On 3/06/03 cement with 250 sks of Class "G" w/ 2% CaCL2 + 1/4# sk Cello-Flake Mixed @ 15.8 ppg > 1.17 cf/sk yeild. 10 bbls cement returned to surface. WOC.

Spud Report

RECEIVED
MAR 1 2 2003

Non-Routine Fracturing

Conversion to Injection

Water Shut-Off

Dispose Water
(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

DIV (House to MINING

14. I hereby certify that the foregoing is true and correct				
Signed Latwis	Title	Drilling Foreman	Date	03/07/2003
Pat Wisener				
CC: UTAH DOGM				
(This space for Federal or State office use)				
Approved by	Title		Date	******
Conditions of approval, if any:				
CC: Utah DOGM				

# INLAND PRODUCT....N COMPANY - CASING & CEME..... REPORT

			8 5/8	CASING SET	AT	310.08			
LAST CASIN	NG 8 5/8"	SET A	AT <b>310.08</b>	,	OPERATOR	₹	Inland Pro	oduction Co	mpanv
DATUM						Canvasba			
DATUM TO		ASING				SPECT			•••
		- AD FLANGE				OR & RIG #			11
TD DRILLER	305	LOGG	ER						
HOLE SIZE			<u> </u>						
LOG OF CA	SING STRIN	IG:				<u>.</u>			
PIECES	OD	`i	MAKE - DESCI	RIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
		42.77 sh jt'	shit						
		WHI - 92 cs					8rd	A	0.95
7	8 5/8"	Maverick S			24#	J-55	8rd	A	302.23
			GUIDE	shoe			8rd	Α	0.9
CASING INV	ENTORY B	AL.	FEET	JTS	TOTAL LEN	GTH OF STE	RING		304.08
TOTAL LEN	GTH OF STI	RING	304.08	7	LESS CUT OFF PIECE				
LESS NON	CSG. ITEMS	}	1.85		PLUS DATUM TO T/CUT OFF CSG				
PLUS FULL	JTS. LEFT (	OUT	0		CASING SET DEPTH				
	TOTAL		291.99	7	],				
TOTAL CSG	. DEL. (W/O	THRDS)	302.23	7		RE			
TIMING			1ST STAGE		]				
BEGIN RUN	CSG.		SPUD	02/21/2003	GOOD CIRC	THRU JOB		Yes	
CSG. IN HO	LE			6:30am	Bbls CMT C	IRC TO SUR	FACE	10	
BEGIN CIRC	;				RECIPROCA	ATED PIPE F	OR	_THRU	FT STROKE
BEGIN PUM	P CMT				DID BACK F	RES. VALVE	E HOLD ?	N/A	
BEGIN DSPI	CMT				BUMPED PI	LUG TO		200	PSI
PLUG DOW	N		Cemented	03/06/2003					
CEMENT US	SED			CEMENT CO	MPANY-	B. J.			
STAGE	# SX			CEMENT TYP	PE & ADDITIV	/ES			
11	250	Class "G" w	/ 2% CaCL2 +	1/4#/sk Cello-F	lake mixed @	15.8 ppg 1.	.17 cf/sk yie	ld	
CENTRALIZ	ER & SCRA	TCHER PLAC	CEMENT			SHOW MAK	E & SPACIN	lG	
Centralizers	s - Middle fi	rst, top seco	ond & third for	3				REC	EIVED
								MAR	1 2 2003
								DIV OF OIL	GAS & MINING
								DIV. OF OIL	, who will make

DATE 03/07/2003

COMPANY REPRESENTATIVE Pat Wisener

STATE COUTAN DIVERSING FOR GAS AND LINING OF ENTITY ACTION FORM FORMS

CPEPATOR	INLAND PRODUCTION COMPANY
ACCRESS	RT. 5 80X 3633
	:3YTGN, UT 8=852

CPERATOR ACCT. NO NS180

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A	99999	12299	<b>43-013-32240</b>	Canvasback #15-22-8-17	SWISE	22	88	175	Duchesno	Febraury 21, 2003	02/21/03
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ACT GN	STARSA STARSA	EALILA AS	· IMICE		CQ :	22	7,0	F5	COUNTY	CATE	<u> </u>
1	99999	12299	43-013-32341	Convastack #12-23-8-17	NWSW:	23	88	17E	Ducitasne	March 5, 2003	03/05/03
AELL, 2 CO		. 12233									
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DIV. OF OIL, GAS & MINING

FORM 3160-5 (June 1990)

1. Type of Well

X

2 Name of Operator

12.

Oil

Well

3. Address and Telephone No.

2056' FEL & 910' FSL

INLAND PRODUCTION COMPANY

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

TYPE OF SUBMISSION

Subsequent Report

Final Abandonment Notice

Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721

012

#### TED STATES **DEPARTIM** ...... NT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.

$\mathbf{U}^{r}$ . $\mathbf{T}^{r}$	ED STATES	FORM APPROVED
DEPART	T OF THE INTERIOR	Budget Bureau No. 1004-0135
BUREAU OF L	AND MANAGEMENT	Expires: March 31, 1993
		5. Lease Designation and Serial No.
SUNDRY NOTICES AND	REPORTS ON WELLS	UTU-77233
orm for proposals to drill or to deep	pen or reentry a different reservoir.	6. If Indian, Allottee or Tribe Name
Use "APPLICATION FO	OR PERMIT -" for such proposals	NA NA
		7. If Unit or CA, Agreement Designation
SUBMIT IN	TRIPLICATE	Canvasback
Gas Well Other		8. Well Name and No. 15-22-8-17
wenout.		9. API Well No.
		43-013-32240
RODUCTION COMPANY		10. Field and Pool, or Exploratory Area
ne No.		
30, Myton Utah, 84052 435-64	16-3721	11. County or Parish, State
otage, Sec., T., R., m., or Survey Description)		
& 910' FSL SW/SE Sec 22.	TWN 8S. R17E	Duchesne, Utah
	TO INDICATE NATURE OF NOTICE, RE	
OF SUBMISSION	TYPE	OF ACTION
Notice of Intent	Abandonment	Change of Plans
Notice of friend	Recompletion	New Construction

Non-Routine Fracturing

Conversion to Injection

Water Shut-Off

Dispose Water (Note: Report results of multiple completion on Well

Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

RECEIVED

MAR 2 6 2003

Weekly Status report for the period of 3-16-03 thru 3-24-03.

Weekly Status Report

Plugging Back

Casing Repair

Other

Altering Casing

DIV. OF OIL, GAS & MINING

On 3-19-03 MIRU Eagle # 1. Set equipment. Pressure test Bop's, Kelly, TIW to 2,000 psi. Test 85/8" csgn to 1.500 psi. Vernal BLM office was notified of test. PU & MU BHA and tag cement @ 260'. Drill out cement and shoe. Con't to drill 77/8" hole with fresh water to a depth of 6318'. Lay down drill string. Open hole log. PU & MU Guide shoe, 1 jt 51/2" csg, Float collar & 146jt's J-55 15.5 # 51/2" csgn. Set @ 6299'/KB. Cement with 400\* sks. 50/50 POZ w/ 3% KCL, 1/4#sk Cello-Flake, 2% Gel, .3%SMS, .05#sk Static free, Mixed @ 14.4PPG >1.24 YLD. Then 310\* sks Prem Litell w/ 3% KCL, 3#/sk Kolseal, 8% Gel, .5SMS, 3#sk CSE, mixed @ 11.0PPG >3.43. Good returns thru job with 45 bbls of 50 bbls dye water to pit. Set slips with 76,000# tension. Nipple down BOP's. Release rig @ 5:30 pm on 3-24-03

14. I hereby certify that the foregoing is true and correct				
Signed LatWisen	Title	Drilling Foreman	Date	03/24/2003
Pat Wisener				
CC: UTAH DOGM				
(This space for Federal or State office use)				
Approved by	Title		Date	
Conditions of approval, if any:		-		
CC: Utah DOGM				

# INLAND PRODUCT N COMPANY - CASING & CEME. REPORT

			5 1/2"	CASING SET	AT	6299.92	_		
					Fit clir @	6281'			
LAST CASI	NG <u>8 5/8"</u>	SET A	AT <u>310.08</u>	3'	OPERATOR	₹	Inland Pro	duction Co	mpany
DATUM	12' KB				WELL				
DATUM TO	CUT OFF C	ASING _	12'		FIELD/PRO	SPECT	Monumen	t Butte	
DATUM TO	BRADENHE	AD FLANGE			CONTRACT	 *OR & RIG		Eagle # 1	
TD DRILLER	6318'	LOGG	ER 6300'						
HOLE SIZE	7 7/8"			···-					
LOG OF CA	SING STRIN	IG:							
PIECES	OD	ITEM -	MAKE - DESC	RIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt		<del></del>					14
		38' @ 4004	·						
146	5 1/2"	ETC LT & C	casing		15.5#	J-55	8rd	Α	6269.67
		Float collar							0.6
1	5 1/2"	ETC LT&C	csg		15.5#	J-55	8rd	Α	17
			GUIDE	shoe			8rd	Α	0.65
CASING INVENTORY BAL.			FEET	JTS	TOTAL LEN	GTH OF STI	RING		6301.92
TOTAL LEN	IGTH OF STI	RING	6301.92	147	LESS CUT OFF PIECE			14	
LESS NON	CSG. ITEMS	i	15.25		PLUS DATUM TO T/CUT OFF CSG			12	
PLUS FULL	JTS. LEFT (	DUT	36.8	1	CASING SE	T DEPTH			6299.92
	TOTAL		6323.47	148	]				
TOTAL CSC	9. DEL. (W/O	THRDS)	6323.47	148		RE			
TIMING	******		1ST STAGE	2nd STAGE					
BEGIN RUN	I CSG.		8:30am		GOOD CIRC THRU JOB YES				
CSG. IN HO	LE		11:30am		Bbls CMT C	IRC TO SUR	FACE	40 of 50 bbls	dye water
BEGIN CIRC	<u> </u>	<u>.</u>	11:45am	11:47am	RECIPROCA	ATED PIPE I	FOR	THRUSTROI	KE_
BEGIN PUM	1P CMT		11:55am	12:23pm	DID BACK PRES. VALVE HOLD ? Yes				
BEGIN DSP	L. CMT		12:45pm		BUMPED PLUG TO 1700 PSI			PSI	
PLUG DOW	/N			1:10pm				_	
CEMENT U	SED			CEMENT CO	MPANY-	B. J.			
STAGE	# SX			CEMENT TYP	E & ADDITIV	/ES			
1	310	Premlite II w	ı/ 10% gel + 3	% KCL, 3#'s /s	k CSE + 2# s	k/kolseal + 1	/4#'s/sk Cell	o Flake	
		mixed @ 11	.0 ppg W / 3.43	3 cf/sk yield					
2	400	50/50 poz V	V/ 2% Gel + 3%	KCL, .5%EC1	,1/4# sk C.F.	2% gel. 3%	SM mixed @	) 14.4 ppg W/	1.24 YLD
CENTRALIZ	ER & SCRA	TCHER PLAC	CEMENT			SHOW MAK	E & SPACIN	IG BF	CEIVED
Centralizer	s - Middle fi	rst, top seco	ond & third. Th	en every third	d collar for a	total of 20.		, , ,	
								MA	IR 2 6 2003
								DIV. OF	OIL. GAS & MININC
								<u> </u>	· <del></del>

DATE 03/24/2003

COMPANY REPRESENTATIVE Pat Wisener

FORM 3160-5 (Jun_ay		STATES OF THE INTERIOR OMANAGEMENT	So get	FORM APPROVED  Budget Bureau No. 1004-0135
013 SUNDRY	NOTICES AND R	EPORTS ON WELLS	5.	Expires: March 31, 1993 Lease Designation and Serial No. UTU-77233
Use	"APPLICATION FOR	or reentry a different reservoir. PERMIT -" for such proposa	ls 6. 1	f Indian, Allottee or Tribe Name <b>NA</b>
1. Type of Well	SUBMIT IN TR	IPLICATE		If Unit or CA, Agreement Designation  CANVASBACK
X Oil Gas Well	Other			Vell Name and No.  CANVASBACK 15-22-8-17  API Well No.
2. Name of Operator INLAND PRODUCTIO	N COMPANY			43-013-32240
3. Address and Telephone No.				Field and Pool, or Exploratory Area  MONUMENT BUTTE
Rt. 3 Box 3630, Myton U	Jtah, 84052 435-646-37 m., or Survey Description)	721	11. (	County or Parish, State
910 FSL 2056 FEL	SW/SE Section 22,			DUCHESNE COUNTY, UT
TYPE OF SUBMIS	ROPRIATE BOX(s) TO I	NDICATE NATURE OF NOTICE	E, REPORT, OR	OTHER DATA
			YPE OF ACTIO	N
Notice of	Intent	Abandonment		Change of Plans
X Subsequer	nt Report	Recompletion Plugging Back		New Construction
		Casing Repair	` <b> </b> -	Non-Routine Fracturing Water Shut-Off
Final Abar	ndonment Notice	Altering Casing	Ė	Conversion to Injection
	[	Weekly status rep	ort	Dispose Water
				Report results of multiple completion on Well letion or Recompletion Report and Log form.)
13. Describe Proposed or Completed Operations (6 ally drilled, give subsurface locations and m	Clearly state all pertinent details, and give easured and true vertical depths for all ma	pertinent dates, including estimated date of starting parkers and zones pertinent to this work.)*	g any proposed work. If well is	direction-
Status report for time pe	eriod 4/14/03 - 4/24/0	)3		
hydraulically fracture tr 6171') were perforated. was perforated: CP4 s treated with 20/40 mes perforated and hydraulicand (5755-5759') were plow-through frac plugs drilled out. Zones were production tbg string we pump was run in well or	eated w/ 20/40 mesh All 4 JSPF. A servids (6285-6295'). All the sand. Stage #2: cally fracture treated perforated and hydrates were used between the swab tested for service run in and anchora sucker rods. Well were	s run and a total of thre sand. Stage #1: CP3 sds ice rig was then moved on 1 4 JSPF. The CP2, 3 a CP1 sds (6094-6105'), (with 20/40 mesh sand. A ulically fracture treated we stages. Fracs were flow and cleanup. Sand was	the Green River (6216-6227'), (control of the Well on 4/17/20 and 4 interval volume (6084-6090') and (114 JSPF. Stage of the 20/40 meshold back through cleaned out to getting (2) 622	/14/03 without use of a service intervals were perforated and 6205-6214') and CP2 sds (6158 /03. The remainder of stage #1 was then hydraulically fracture d CP.5 sds (6054-6061') were ge #3: LODC sds (5773-5777') sand. All 4 JSPF. Composite gh chokes. Bridge plugs were of TD @ 6318'. A BHA and 11'. A repaired 1 1/2" bore rod in 4/24/03.
Signed Martha Hall	the Nall	Title Office Manager		Date 4/25/2003
CC: UTAH DOGM				
(This space for Federal or State office to Approved by	ise)			
Conditions of approval, if any:		Title		Date
· ···				APR 2 8 2003



May 27, 2003

State of Utah, Division of Oil, Gas and Mining Attn: Ms. Carol Daniels P.O. Box 145801 Salt Lake City, Utah 84144-5801

Attn: Ms. Carol Daniels

Canvasback 15-22-8-17 (43-013-32240) Duchesne County, UT

Dear Ms. Carol Daniels

Enclosed is a Well Completion or Recompletion Report and Log form (Form 3160-4). We are no longer sending Log copies since Dave Jull of Phoenix Surveys is already doing so.

If you should have any questions, please contact me at (303) 382-4449.

Sincerely,

Brian Harris Engineering Tech

**Enclosures** 

cc: Bureau of Land Management

Vernal District Office, Division of Minerals

Attn: Edwin I. Forsman 170 South 500 East Vernal, Utah 84078

Well File – Denver Well File – Roosevelt Patsy Barreau/Denver Bob Jewett/Denver

MAY 2 9 2003
DIV. OF OIL, GAS & MINING

FORM 3160-4 (July 1992)

014

Brian Harris

# **UNITED STATES DEPARTMENT OF THE INTERIOR**

SUBMIT IN DUPLICATE\* (See other instructions ons

reverse side)

FORM APPROVED OMB NO. 1004-0137

Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

5/27/2003

BDH

					MANAGEME				TU-77233
WELL (	COMPL	ETION	OR R	<b>ECON</b>	IPLETION I	REPORT A	ND LOG*	6. IF INDIAN, ALLO	TTEE OR TRIBE NAME NA
la. TYPE OF WORK						_		7. UNIT AGREEMEN	
1b. TYPE OF WELL		WELL	X	GAS WELL	DRY	Other			anvasback
NEW Y	work	DEEDEN		PLUG	DIFF			8. FARM OR LEASE	NAME, WELL NO.
WELL ^	OVER	DEEPEN		BACK	RESVR.	Other		CB	15-22-8-17
2. WAINE OF OPERATOR		11	II AND	RESOL	JRCES INC.			9. WELL NO.	040 00040
3. ADDRESS AND TELEPH	HONE NO.	-			<del></del>			10. FIELD AND POOL	-013-32240 LOR WILDCAT
4. LOCATION OF WEL	1 (Parant lan	410 17th	St. Su	ite 700	Denver, CO 8	30202		Mor	nument Butte
At Surface	L (Report loca				any State requirement WSW) Sec. 22, 1		=	11. SEC., T., R., M., O OR AREA	R BLOCK AND SURVEY
At top prod. Interval repo	orted below		2 5 2000	, , <u>, , , , , , , , , , , , , , , , , </u>	VIOIT, GGG. 22,	rwp 03, 141g 171	-		Twp 8S, Rng 17E
At total depth				14. API NO.		DATE ISSUED	)	12. COUNTY OR PAR	ISH 13. STATE
				43	-013-32240	1	2/24/02	Duchesn	
15. DATE SPUDDED 2/21/03	16. DATE T.D. 3/2	reached 23/03	17. DA		(Ready to prod.) 24/03		DF, RKB, RT, GR, ET 168'	c.)* KB 5180'	19. ELEV. CASINGHEAD
20. TOTAL DEPTH, MD &	TVD	21. PLUG BAG	CK T.D., MD	& TVD	22. IF MULTIPLE	COMPL.,	23. INTERVALS	ROTARY TOOLS	CABLE TOOLS
6318'		_	6299'		HOW MANY	*	DRILLED BY		
4. PRODUCING INTERVA	AL(S), OF THIS	COMPLETION-		OM, NAME	(MD AND TVD)*		>	X	25. WAS DIRECTIONAL
					River 5755'-	6295'			SURVEY MADE
						<del>-</del>			No
Dual Induction	OTHER LOGS I	SP, Com	ensate	3-3 ed Dens	r <i>i-o</i> ろ ity, Compensa	ated Neutron	, GR, Calipe	4-19-03 Cement Bond Lo	g No
3. 3-3/-03 CASING SIZE/GE		WEIGHT		CASI	NG RECORD (Repo	rt all strings set in	well)		
8-5/8" - J-		24		DEP	310'	HOLE SIZE 12-1/4"		IENT, CEMENTING RECORD with 250 sx Class "G" cm	AMOUNT PULLED
5-1/2" - J-	-55	15.		6299'		7-7/8"		te II and 400 sx 50/50 P	<del></del>
							0.0000.101111	10 11 U110 400 3x 30/30 1	02
9. SIZE	man		ER RECO		T		30.	TUBING RECORD	
SIZE	TOP	(MD)	вотто	OM (MD)	SACKS CEMENT*	SCREEN (MD)	2-7/8"	DEPTH SET (MD)	PACKER SET (MD)
		· · · · · · · · · · · · · · · · · · ·					2-1/6	EOT @ 6220'	TA @ 6119'
I. PERFORATION RECO	ORD (Interval, s	size and number	)			32.	ACID, SHOT	FRACTURE, CEMENT SQ	
	ERVAL		SI	ZE	SPF/NUMBER		ERVAL (MD)		OF MATERIAL USED
(CP2,3,4	4) <b>6285-95'</b> ,		0.	20"	4/470	0450	00051		
	0205-14	l', 6158-71'	.0.	38"	4/172	6158'-	-6295'	Frac w/ 98,671# 20/4	0 sand in 424 bbls fluid
(CP.5,1) 6094-610	5', 6084-90	0'. 6054-61'	.0:	38"	4/96	6054'	-6105'	Eron w/ 79 924# 20/4	0 sand in 343 bbls fluid
		,				0004	-0103	FIAC W/ 70,034# 20/4	J sand in 343 bbis fluid
(LOD	C) 5773-77	7', <b>5755-5</b> 9'	.0:	38"	4/32	5755'-	-5777'	Frac w/ 19,757# 20/4	0 sand in 91 bbls fluid
<b>.</b>									
3.* PATE FIRST PRODUCTION	N	PRODUCTIO	N METHOD	(Flowing gar	PRODUC s lift, pumpingsize and t			T	
4/24/03					-1/2" x 1-1/2" x		Pump	WEL	L STATUS (Producing or shut-in) PRODUCING
ATE OF TEST	HOL	JRS TESTED	СНОКІ			LBBLS.	GASMCF.	WATERBBL.	GAS-OIL RATIO
10 day ave	,				>	63	63	20	1000
LOW. TUBING PRESS.		ING PRESSUR	1	JLATED	OIL-BBL.	GASMCF.	1 00	WATERBBL. OIL GR.	AVITY RECEIVED
			, 124-HOU	JR RATE		1	1		IILOEIVED
4. DISPOSITION OF GAS (	(Sold, used for fu	uel, vented, etc.)	Sold		for Fuel		_ <u></u>	TEST WITNESSED BY	MAY 2 9 2003
5. LIST OF ATTACHMEN	TS		- Join	<u> </u>	.01 1 401		<del>-</del>		DIV. OF OIL. GAS & MININ
6. I hereby certify that the	he foregoing a	ind a tached in	formation i	s complete a	and correct as determi	ned from all availab	le records		- SILI UNO & MININ
<b>1</b> ►	ma	Ham			TITLE		eering Techr	nician <sub>D.</sub>	ATE 5/27/2003

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and 38. GEOLOGIC MARKERS recoveries); FORMATION TOP воттом DESCRIPTION, CONTENTS, ETC. TOP NAME TRUE MEAS. DEPTH VERT. DEPTH Well Name Canvasback 15-22-8-17 Garden Gulch Mkr 4390' Garden Gulch 2 4506' Point 3 Mkr 4783' X Mkr 5018' Y-Mkr 5052' Douglas Creek Mkr 5141' BiCarbonate Mkr 5454' B Limestone Mkr 5594' Castle Peak 60341 Basal Carbonate Total Depth (LOGGERS 6318'

FORM 3160-5 (June 1990)

015

	, , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
DEPAR	Trans	OF	THE	INTER	Ю
BURE	AU OF LA	ND N	(ANA	SEMENT	

FORM	APPRO	VEL	)
Budget	Bureau	No.	1004-013

Budget Bureau No.	1004-013
E	1007

IEDSIALES
DEPART NT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS	UTU-77233
Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  Use "APPLICATION FOR PERMIT -" for such proposals	6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation CANVASBACK
I. Type of Well  X Oil Gas Well Other	8. Well Name and No.  CANVASBACK 15-22-8-17  9. API Well No.
2. Name of Operator INLAND PRODUCTION COMPANY	43-013-32240 10. Field and Pool, or Exploratory Area
3. Address and Telephone No.	MONUMENT BUTTE
Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721	11. County or Parish, State
4. Location of Well (Footage, Sec., T., R., m., or Survey Description) 910 FSL 2056 FEL SW/SE Section 22, T8S R17E	DUCHESNE COUNTY, UT
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
	F ACTION

12.	CHECK APPROPRIATE BOX(s)	TO IND	ICATE NATURE OF	NOTICE, REPORT, OR C	TH	IER DATA
	TYPE OF SUBMISSION			TYPE OF ACTIO	N	
	X Notice of Intent Subsequent Report Final Abandonment Notice		Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	•		Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water eport results of multiple completion on Well
				Con	nplet	on or Recompletion Report and Log form.)

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Inland's secondary recovery project.

Water not meeting quality criteria, is disposed at Inland's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

Signed Mandie Crozier	Title	Regulatory Specialist Date 11/14/2003
CC: UTAH DOGM		RECEIVED
(This space for Federal or State office use)		Movers
Approved by	Title	
Conditions of approval, if any:		
CC: Utah DOGM		DIV. OF OIL, GAS & MINING

<sup>13.</sup> Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. L'well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)



# United States Department of the Interior



# BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155 http://www.blm.gov

IN REPLY REFER TO: 3106 (UT-924)

September 16, 2004

Memorandum

To:

Vernal Field Office

From:

Acting Chief, Branch of Fluid Minerals

Subject:

Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Milas Llouters

Michael Coulthard Acting Chief, Branch of Fluid Minerals

#### Enclosure

1. State of Texas Certificate of Registration

cc:

MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225 State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114

Teresa Thompson Joe Incardine Connie Seare

UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
•	17424	63073O	74806	7695 <del>4</del> 76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72000A 72613A
02458	26026A	64381	74390	77337	72013A 73520X
03563	30096	64805	74391	77338	73320X 74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357	75023X 76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553·	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016 <sup>.</sup>	
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833 <sup>,</sup>	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		•
11385	52013	73086	76240		
13905	52018	73087	76241		
15392	58546	73807	76560		



# Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company Filing Number: 41530400

**Articles of Amendment** 

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.





Secretary of State

# ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION OF INLAND PRODUCTION COMPANY

In the Office of the Secretary of State of Texas

SEP 02 2004

Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

#### ARTICLE 1 - Name

The name of the corporation is Inland Production Company.

#### ARTICLE 2 - Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE - The name of the corporation is Newfield Production Company."

ARTICLE 3 - Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

Susan G. Riggs, Treasurer

# STATE OF UTAH

AMENDED REPORT	
(highlight shanges)	

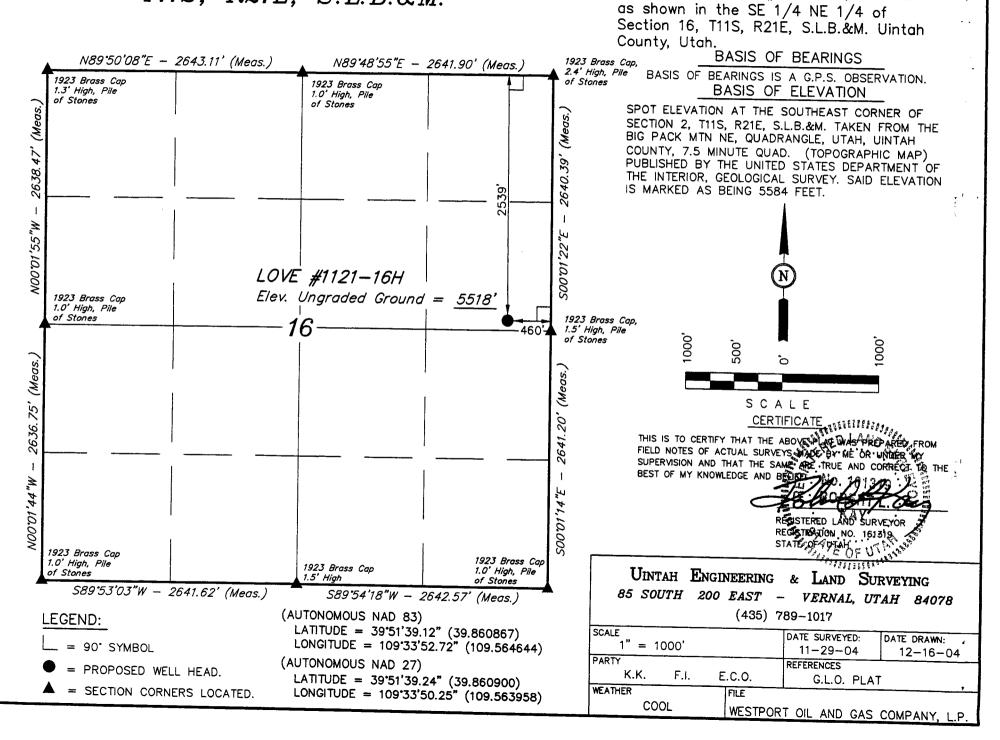
5. MINERAL LEASE NO: 6. SURFACE:

FORM 3

OIAIL OI OIAII
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

	,	APPLICA	HON FOR	PERMIT IC	DRILL			ML-22347-A	State
1A. TYPE OF WORK: DRILL  REENTER DEEPEN D								7. IF INDIAN, ALLOTTEE OR	TRIBE NAME:
B. TYPE OF WELL: OIL GAS OTHER SINGLE ZONE MULTIPLE ZONE   8. UNIT OF CA AGREEMENT NAME:									IAME:
2. NAME OF OPER		AS COMPA	NY L.P.					9. WELL NAME and NUMBER LOVE 1121-16H	:
3. ADDRESS OF C		\( \( \bar{C} \)				IONE NUMBER:		10. FIELD AND POOL, OR WI	
1368 S. 120		CITY VER	NAL STA	ATE UT ZIP 840	J/8 (4:	35) 781-7024		UNDESIGNATED	
		•	62283	4x 30	1. 840 <i>8</i> 64	P		11. QTR/QTR, SECTION, TOV MERIDIAN:	VNSHIP, RANGE,
AT SURFACE: 2539'FNL & 460'FEL 4413092 Y -109. 563965  AT PROPOSED PRODUCINGZONE:  SENE 16 11S 21E									; 21E
14. DISTANCE IN	MILES AND DIRE	CTION FROM NE	AREST TOWN OR P	OST OFFICE:				12. COUNTY:	13. STATE:
27.1 MILE	S SOUTH	EAST OF (	DURAY, UTA	Н				UINTAH	UTAH
16. DISTANCE TO	NEAREST PROF	PERTY OR LEASE	LINE (FEET)	16. NUMBER OF	F ACRES IN LEASE:		17. N	UMBER OF ACRES ASSIGNED	TO THIS WELL:
460'						1275.39			40
18. DISTANCE TO	NEAREST WELL		MPLETED, OR	19. PROPOSED	DEPTH:		20. B	OND DESCRIPTION:	-
REFER TO		E (FEET)				8,800	R	LB0005238	
21. ELEVATIONS	(SHOW WHETHE	ER DF, RT, GR, E	TC.):	22. APPROXIM	ATE DATE WORK WI	LL START:	23. E	STIMATED DURATION:	
5518'GL									
24.			PROPO	SED CASING A	ND CEMENTIN	IG PROGRAM			
SIZE OF HOLE	CASING SIZE,	, GRADE, AND W	EIGHT PER FOOT	SETTING DEPTH		CEMENT TYPE, QUA	ANTITY	, YIELD, AND SLURRY WEIGHT	
12 1/4	9 5/8	H-40	32.3#	1,900	265 SX				
7 7/8	4 1/2	I-80	11.6#	8,800	1880 SX				
				-,,,,,,					
	<u></u>	·						· · · · · · · · · · · · · · · · · · ·	
									<del></del>
25.				ATTA	CHMENTS				
VERIFY THE FOL	LOWING AREAT	TACHED IN ACC	ORDANCEWITH THE	UTAH OIL AND GAS C	ONSERVATION GEN	ERAL RULES:			
<b>[7</b> ]					<b>1</b> [7]				
WELL PL	AT OR MAP PRE	PARED BY LICEN	ISED SURVEYOR OR	ENGINEER	✓ COMPL	ETE DRILLING PLAN			
<b>V</b> EVIDENC	EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER  FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER							IE LEASE OWNER	
	<sub>PRINT)</sub> SHEII	LAگPCHE	GO.			REGULATOR'	Y AN	IAI YST	
NAME (PLEASE PRINT) STIELLY POTTEGO, TITLE REGULATORY ANALYST									
SIGNATURE	[[NOY]	r Upli	lego		DATE _	1/20/2005			
(This space for Sta	ite use only)	-	V						
,	,,			en er	Appro	ved by the			
			-	; _	Utah I	Division of		I RECEIVI	
API NUMBER AS	SIGNED:	43-04	7-3625	1	OlhoGas	and Minin	g	3 I I from Sand from I W I	none Suach
		•		Da	ate: 03-	10-050	$\overline{\cap}$	JAN 2 4 20	105
(11/2001)					ths on Riverse side)	Mad	女	- ETV. OF OIL, GAS &	
					$\sim$	(1)	-		

# T11S, R21E, S.L.B.&M.



WESTPORT OIL AND GAS COMPANY, L.P.

Well location, LOVE #1121-16H, located

#### Division of Oil, Gas and Mining

#### **OPERATOR CHANGE WORKSHEET**

017

Change of Operator (Well Sold)

#### **ROUTING** 1. GLH 2. CDW 3. FILE

Designation of Agent/Operator

#### X Operator Name Change

#### Merger

The operator of the well(s) listed below has	9/1/2004								
FROM: (Old Operator):	TO: ( New Operator):								
N5160-Inland Production Company	N2695-Newfield Production Company								
Route 3 Box 3630				Route 3	Route 3 Box 3630				
Myton, UT 84052				Myton,	UT 84052				
Phone: 1-(435) 646-3721				Phone: 1-(435)	646-3721				
CA N	lo.			Unit:	CAN	VASBACI	(GREEN	RIVER)	
WELL(S)									
NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
BALCRON FED 12-22Y	22	080S	170E	4301331476		Federal	WI	A	
BALCRON MON FED 22-22-8-17Y	22			4301331538		Federal	ow	P	
BALCRON MON FED 11-22-8-17Y	22			4301331539	12299	Federal	ow	P	
MON FED 13-22-8-17Y	22	080S	170E	4301331583	12299	Federal	ow	S	
MON FED 32-22-8-17	22	080S	170E	4301331586	12299	Federal	WI	Α	
MON FED 31-22-8-17	22	080S	170E	4301331587	12299	Federal	ow	P	
MON FED 33-22-8-17	22	080S	170E	4301331588	12299	Federal	ow	P	
MON FED 23-22-8-17Y	22	080S	170E	4301331702	12299	Federal	WI	Α	
PARIETTE DRAW 8-22	22	080S	170E	4301331826	12299	Federal	ow	P	
CANVASBACK 13A-22-8-17	22	080S	170E	4301332238	12299	Federal	ow	P	
CANVASBACK 14-22-8-17	22	080S	170E	4301332239	12299	Federal	ow	P	
CANVASBACK 15-22-8-17	22	080S	170E	4301332240	12299	Federal	OW	P	
CANVASBACK 16-22-8-17	22	080S	170E	4301332241	12299	Federal	ow	P	
FEDERAL 13-23-8-17	23	080S	170E	4301332340	12299	Federal	OW	P	
CANVASBACK 12-23-8-17	23	080S	170E	4301332341	12299	Federal	ow	P	
CANVASBACK 4-23-8-17	23	080S	170E	4301332342	12299	Federal	OW	P	
CANVASBACK 5-23-8-17	23	080S	170E	4301332343	12299	Federal	ow	P	
FEDERAL 14-23-8-17	23	080S	170E	4304734556	12299	Federal	ow	P	
CANVASBACK 15-23-8-17	23	080S	170E	4304734557	12299	Federal	D	PA	
CANVASBACK 3-23-8-17	23	080S	170E	4304734567	12299	Federal	OW	P	
							<del>                                     </del>		

#### **OPERATOR CHANGES DOCUMENTATION**

#### Enter date after each listed item is completed

(R649-8-10) Sundry or legal documentation was received from the FORMER operator on: 9/15/2004 (R649-8-10) Sundry or legal documentation was received from the NEW operator on: 9/15/2004

The new company was checked on the Department of Commerce, Division of Corporations Database on: 2/23/2005

YES Business Number: 755627-0143

Is the new operator registered in the State of Utah:

If NO, the operator was contacted contacted on:

6a. (R649-9-2)Waste Management Plan has been received on:	IN PLACE		
6b. Inspections of LA PA state/fee well sites complete on:	waived		
7. Federal and Indian Lease Wells: The BLM and or 1	the BIA has appro	oved the merger.	name change.
or operator change for all wells listed on Federal or Indian lea		BLM_	BIA
8. Federal and Indian Units:		,	
The BLM or BIA has approved the successor of unit operate	or for wells listed on	: <u>n/a</u>	<del></del>
9. Federal and Indian Communization Agreement	ts ("CA"):		
The BLM or BIA has approved the operator for all wells lis		na/	_
	D: : : 1	LUCE 5 TO	
			nsfer of Authority to
Inject, for the enhanced/secondary recovery unit/project for the	he water disposal we	ll(s) listed on:	2/23/2005
DATA ENTRY:			
1. Changes entered in the Oil and Gas Database on:	2/28/2005		
2. Changes have been entered on the Monthly Operator Chang	ge Spread Sheet on:	2/28/200	5
onling of him to over the real of the fixed straining of personal contents	50 0 p. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		<u></u>
3. Bond information entered in RBDMS on:	2/28/2005		
4. Fee/State wells attached to bond in RBDMS on:	2/28/2005		
2000-000			
5. Injection Projects to new operator in RBDMS on:	2/28/2005		
6. Receipt of Acceptance of Drilling Procedures for APD/New of	on:	waived	
FEDERAL WELL(S) BOND VERIFICATION:			
1. Federal well(s) covered by Bond Number:	<u>UT 0056</u>		
INDIAN WELL(S) BOND VERIFICATION:			
1. Indian well(s) covered by Bond Number:	61BSBDH2912		
· · · · · · · · · · · · · · · · · · ·			
FEE & STATE WELL(S) BOND VERIFICATION			
1. (R649-3-1) The <b>NEW</b> operator of any fee well(s) listed cover	red by Bond Number	61BSBDH2	<u>.919</u>
2. The FORMER operator has requested a release of liability fro	om their hand on:	n/a*	
The Division sent response by letter on:	n/a		
• •			
LEASE INTEREST OWNER NOTIFICATION:			
<ol><li>(R649-2-10) The FORMER operator of the fee wells has been of their responsibility to notify all interest owners of this change</li></ol>		med by a letter from n/a	the Division
of their responsibility to notify an interest owners of this change	ge on.	11/ a	
COMMENTS:			
*Bond rider changed operator name from Inland Production Com	pany to Newfield Pro	oduction Company -	received 2/23/05

# **OPERATOR CHANGE WORKSHEET** 019

Change of Operator (Well Sold)

The operator of the well(s) listed below has changed, effective:

ROUTING 1. GLH 2. CDW 3. FILE

Designation of Agent/Operator

9/1/2004

## X Operator Name Change

#### Merger

FROM: (Old Operator):				<b>TO:</b> ( New O	perator):				7
N5160-Inland Production Company	N2695-Newfield Production Company								
Route 3 Box 3630	Route 3 Box 3630								
Myton, UT 84052	Myton,	Myton, UT 84052							
Phone: 1-(435) 646-3721				Phone: 1-(435)	646-3721				ı
CA N	Unit:	CAN	VASBAC	K (GREEN	RIVER)	7			
WELL(S)									٦
NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL	٦
		<b>.</b>			NO	TYPE	TYPE	STATUS	
BALCRON FED 12-22Y	22			4301331476	12299	Federal	WI	A	╛
BALCRON MON FED 22-22-8-17Y	22	080S	170E	4301331538	12299	Federal	OW	P	
BALCRON MON FED 11-22-8-17Y	22	080S	170E	4301331539	12299	Federal	OW	P	
MON FED 13-22-8-17Y	22	080S	170E	4301331583	12299	Federal	ow	S	
MON FED 32-22-8-17	22	080S	170E	4301331586	12299	Federal	WI	Α	
MON FED 31-22-8-17	22	080S	170E	4301331587	12299	Federal	ow	P	7
MON FED 33-22-8-17	22	080S	170E	4301331588	12299	Federal	ow	P	7
MON FED 23-22-8-17Y	22	080S	170E	4301331702	12299	Federal	WI	A	7
PARIETTE DRAW 8-22	22	080S	170E	4301331826	12299	Federal	ow	P	
CANVASBACK 13A-22-8-17	22	080S	170E	4301332238	12299	Federal	ow	P	٦
CANVASBACK 14-22-8-17	22	080S	170E	4301332239	12299	Federal	ow	P	I
CANVASBACK 15-22-8-17	22	080S	170E	4301332240	12299	Federal	ow	P	I
CANVASBACK 16-22-8-17	22	080S	170E	4301332241	12299	Federal	ow	P	7
FEDERAL 13-23-8-17	23	080S	170E	4301332340	12299	Federal	ow	P	٦
CANVASBACK 12-23-8-17	23	080S	170E	4301332341	12299	Federal	ow	P	٦
CANVASBACK 4-23-8-17	23	080S	170E	4301332342	12299	Federal	ow	P	٦
CANVASBACK 5-23-8-17	23	080S	170E	4301332343	12299	Federal	ow	P	٦
FEDERAL 14-23-8-17	23	080S	170E	4304734556	12299	Federal	ow	P	٦
CANVASBACK 15-23-8-17	23	080S	170E	4304734557	12299	Federal	D	PA	٦
CANVASBACK 3-23-8-17	23	080S	170E	4304734567	12299	Federal	ow	P	
		<u> </u>	<u> </u>						4

## **OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

(R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004 9/15/2004 (R649-8-10) Sundry or legal documentation was received from the NEW operator on:

The new company was checked on the Department of Commerce, Division of Corporations Database on:

2/23/2005

Is the new operator registered in the State of Utah:

YES Business Number:

755627-0143

If NO, the operator was contacted contacted on:

6b.	Inspections of LA PA state/fee well sites complete on:	waived				
						*
7.	Federal and Indian Lease Wells: The BLM and or t	he BIA has appro	ved the	merger, n	name change.	
	or operator change for all wells listed on Federal or Indian leas		BLM	_	BIA	
						· · · · · · · · · · · · · · · · · · ·
8.	Federal and Indian Units:					
	The BLM or BIA has approved the successor of unit operator	or for wells listed on:		n/a		
^	Tedeval and Indian Communication Agreement	c (!!CA!!).				
9.	Federal and Indian Communization Agreements The BLM or BIA has approved the operator for all wells list			na/		
	The DEW of DIA has approved the operator for all wens his	ca wiami a CA on.		110/		
10	. Underground Injection Control ("UIC") The	Division has approv	ed UIC F	orm 5, Tra	nsfer of Authori	ity to
	Inject, for the enhanced/secondary recovery unit/project for the	ne water disposal we	ll(s) listed	l on:	2/23/2005	
_	ACC A EDICODAY.		<del></del>			
DA 1	ATA ENTRY:	2/29/2005				
1.	Changes entered in the Oil and Gas Database on:	2/28/2005				
2.	Changes have been entered on the Monthly Operator Chang	e Spread Sheet on:		2/28/2005	5	
					<del></del>	
3.	Bond information entered in RBDMS on:	2/28/2005				
4.	Fee/State wells attached to bond in RBDMS on:	2/28/2005				
т.	Techsule wells atmoned to bolid in NDDING on.	2/20/2003				
5.	Injection Projects to new operator in RBDMS on:	2/28/2005				
_	Passint of Assertance of Drilling Procedures for APD/Nove	<b></b>	waived			
6.	Receipt of Acceptance of Drilling Procedures for APD/New o	· · · · · · · · · · · · · · · · · · ·	waiveu			
F	EDERAL WELL(S) BOND VERIFICATION:					
1.	Federal well(s) covered by Bond Number:	UT 0056				
IN	DIAN WELL(S) BOND VERIFICATION:					
1.	Indian well(s) covered by Bond Number:	61BSBDH2912				
171	EF & STATE WELL (S) DONN VEDIEICATION	•	_			
	EE & STATE WELL(S) BOND VERIFICATION: (R649-3-1) The NEW operator of any fee well(s) listed covered.		4	S1BSBDH2	010	
1.	(1042-5-1) The 14E W operator of any fee wen(s) fished cover-	ed by Bolla Number	,			
2.	The FORMER operator has requested a release of liability from	m their bond on:	n/a*	-		
_,	The Division sent response by letter on:	n/a		<del>-</del>		
				· ····································		<del>,</del>
	EASE INTEREST OWNER NOTIFICATION:					
3.	(R649-2-10) The <b>FORMER</b> operator of the fee wells has been		. *	letter from t	the Division	
	of their responsibility to notify all interest owners of this change	ge on:	n/a	-		
C	DMMENTS:					
	ond rider changed operator name from Inland Production Comp	oany to Newfield Pro	duction (	Company - r	eceived 2/23/05	

IN PLACE

6a. (R649-9-2)Waste Management Plan has been received on:



State of Utah

#### Department of **Natural Resources**

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT Acting Division Director JON M. HUNTSMAN, JR. Governor

> GARY R. HERBERT Lieutenant Governor

> > March 10, 2005

Westport Oil & Gas Company, LP 1368 South 1200 East Vernal, UT 84078

Love 1121-16H Well, 2539' FNL, 460' FEL, SE NE, Sec. 16, T. 11 South, Re: R. 21 East, Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-36257.

Sincerely,

John R. Baza Associate Director

pab **Enclosures** 

**Uintah County Assessor** cc:

**SITLA** 



<b>Operator:</b>	Westport Oil & Gas Company, LP	
Well Name & Number	Love 1121-16H	
API Number:	43-047-36257	
Lease:	ML-22347-A	_

**Conditions of Approval** 

Sec. 16

## 1. General

Location: <u>SE NE</u>

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

**T.** 11 South

**R.** 21 East

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

Page 2 API #43-047-36257 March 10, 2005

6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18<sup>™</sup> STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

MAR 1 1 2005

Ref: 8P-W-GW

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Mike Guinn
Vice President - Operations
Newfield Production Co.
Route 3 - Box 3630
Myton, Utah 84502

RECEIVED MAR 1 5 2005

DINE OF OIL CAS & MINING

RE: ADDITIONAL WELL TO AREA PERMIT

Canvasback Area Permit: UT20855-00000

Canvasback No. 15-22-8-17

Well ID: 20855-06415 SW SE Sec. 22 - T8S - 17E Duchesne County, Utah

Dear Mr. Guinn:

The Newfield Production Co. (Newfield) request to convert a former Green River Formation oil well, the Canvasback No. 15-22-8-17, to a Garden Gulch-Douglas Creek-Basal Carbonate Members of the Green River Formation enhanced recovery injection well in the Canvasback Area Permit is hereby authorized. The proposed Canvasback No. 15-22-8-17 Class II enhanced recovery injection well is within the exterior boundary of the Canvasback Area Permit UT20855-00000; is within the exterior boundary of the Uintah & Ouray Indian Reservation; and the addition is being made under the authority of 40 CFR § 144.33 (c) and the terms of the Area Permit. Unless specifically mentioned in the enclosed Authorization For An Additional Well, all terms and conditions of the original Area Permit will apply to the conversion, operation, monitoring, and plugging and abandonment of the Canvasback No. 15-22-8-17.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Prior to beginning injection, the Environmental Protection Agency (EPA) requires that Newfield submit for review and approval (1) the results of a Part I (Internal) mechanical integrity test (MIT), (2) a pore pressure calculation of the injection interval, (3) an EPA Form No. 7520-12 (Well Rework Record, enclosed).

Part II. Section C. Condition No. 5 (b) (1), (<u>Injection Pressure Limitation</u>), Canvasback Area Permit (UT20855-00000), cites the method by which the maximum initial allowable injection pressure (MAIP) shall be calculated for each Additional Well to the Canvasback Area Permit. As a result, the MAIP for the Canvasback No. 15-22-8-17 shall not exceed **1755 psig**. The Canvasback Area Permit, Part II. C. 5., provides an opportunity for the permittee to request an increase, or decrease, in the initial maximum surface injection pressure.

Please be aware that Newfield does not have authorization to begin injection into the Canvasback No. 15-22-8-17 until the <u>Prior to Commencing Injection</u> requirements, listed above, have been submitted and evaluated by the EPA, and Newfield has received written authorization to begin injection from the Assistant Regional Administrator, or the Assistant Regional Administrator's authorized representative.

If Newfield has any questions, please call Mr. Dan Jackson at (800) 227-8917 (Ext. 6155), or in the Denver area at (303) 312-6155. Please submit the required pre-authorization to inject data to <u>ATTENTION: DAN JACKSON</u>, at the letterhead address, citing <u>MAIL CODE:</u> 8P-W-GW very prominently.

Sincerely,

Stephen S. Tuber

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

Carol L. Carybell for

enclosures: Authorization For Conversion of An Additional Well

EPA Form No. 7520-12 (Well Rework Record)

Guidance No. 39: Part I Mechanical Integrity (Internall)

Schematic Diagram: Proposed Conversion

cc w/ enclosures: Maxine Natchees

Chairperson

Uintah & Ouray Business Committee

Ute Indian Tribe

Elaine Willie Environmental Coordinator Ute Indian Tribe

Chester Mills
Superintendent
Bureau of Indian Affairs
Uintah & Ouray Indian Agency

David Gerbig Operations Engineer Newfield Production Company

Gil Hunt Technical Services Manager State of Utah - Natural Resources

Kirk Fleetwood Sr. Petroleum Engineer Bureau of Land Management Vernal District



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18<sup>TH</sup> STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

# AUTHORIZATION FOR AN ADDITIONAL WELL TO THE CANVASBACK AREA PERMIT: UT20855-00000

The Environmental Protection Agency (EPA) authorizes the inclusion of an additional enhanced recovery injection well to the Canvasback Area Permit No. UT20855-00000, as authorized by 40 CFR § 144.33 (c). The additional well is described as:

**WELL NAME: CANVASBACK NO. 15-22-8-17** 

WELL PERMIT NUMBER: UT20855-06415

SURFACE LOCATION: 910' FSL & 2056' FEL (SW SE)

Sec. 22 - T8S - R17E Duchesne County, Utah.

This well is subject to all provisions of the original Canvasback Area Permit No. UT20855-00000, and subsequent Modifications, unless specifically detailed below:

UNDERGROUND SOURCE OF DRINKING WATER (USDW): The base of the USDW (Total Dissolved Solids less than 10,000 mg/l) in the Canvasback No.15-22-8-17 occurs within the Uinta Formation less than 50 feet from ground level (GL). The source for the location of the base of the USDW is the STATE OF UTAH: PUBLICATION NO. 2. BASE OF MODERATELY SALINE GROUND WATER IN THE UINTA BASIN, UTAH. Surface casing was set at 310 feet kelly bushing (KB) and cemented to the surface.

Reference: <a href="http://NRWRT1.NR.STATE.UT.US...">http://NRWRT1.NR.STATE.UT.US...</a> Water Rights...Queries...POD: Within the one-quarter (1/4) mile Area-of-Review (AOR) around the Canvasback No. 15-22-8-17 there are no reservoirs, streams, springs or wells.

#### WATER ANALYSES:

Produced Green River Formation Water: (4-28-04) 58,696 mg/l TDS.

Source Water: Johnson Water District Reservoir. (3/31/04) 400 mg/l TDS.

Blended Injectate: (5/04/04) 29,803 mg/l TDS.

## CONFINING ZONE REVIEW: CANVASBACK NO. 15-22-8-17. (4756' - 4200')

The EPA has authorized the gross interval from the top of the Garden Gulch Member to the top of the Wasatch as the enhanced recovery injection interval within the Canvasback Area Permit. Overlying the top of the Garden Gulch Member (4200 feet), in the Canvasback No. 15-22-8-17, are thirty-four (34) feet of Green River Formation black, slightly silty, impervious shale which forms an effective lithologic confining zone.

#### INJECTION ZONE REVIEW: CANVASBACK NO. 15-22-8-17.

The Canvasback Final Area Permit (Effective August 18, 2000) authorized injection into the Garden Gulch and Douglas Creek Members of the Green River Formation. By Major Permit Modification No. 3 (Effective September 10, 2003) the EPA authorized the gross Green River Formation Garden Gulch-Douglas Creek-Basal Carbonate Members as the enhanced recovery injection interval for the Canvasback Area Permit. This Modification also recognized the Federal No. 1-26 (NE NW Sec. 26 - T8S - R17E), UIC Permit No. UT20702-04671, as the TYPE WELL for identifying the tops of the Garden Gulch Member, the Douglas Creek Member, the Basal Carbonate Member, the top of the Wasatch Formation and the "Confining Zone" overlying the top of the Garden Gulch Member.

The authorized injection zone for the Canvasback No. 15-22-8-17 will be from the Garden Gulch Member (4200 feet) to the top of the Wasatch Formation (Estimated to be 6575 feet).

Lithologically, the gross authorized enhanced recovery injection interval, Garden Gulch to the top of the Wasatch Formation, is fluvial and lacustrine shale, fluvial and lacustrine sandstone, lacustrine marlstone, and limestone. The Uinta and Green River Formations are predominantly non-lacustrine fluvial shale and sandstone on the basin margins, whereas lacustrine deposition predominates in the central basin area for these two formations. The Wasatch Formation is predominantly fluvial, except for increasing minor lacustrine deposition in the central basin area.

# WELL CONSTRUCTION REVIEW: CANVASBACK NO. 15-22-8-17.

SURFACE CASING: 8-5/8 inch casing is set at 310 feet in a 12-1/4 inch hole, using 250 sacks of Class "G" cement circulated to the surface. The base of the USDW is less than fifty (50) feet from ground level.

LONGSTRING CASING: 5-1/2 inch casing is set at 6300 feet kelly bushing (KB) in a 7-7/8 inch hole, and cemented with 310 sacks of Premium Lite II mixed and 400 sacks of 50/50 Pozmix.

The operator identifies the top of cement at 400 feet.

The EPA analysis of the CBL/GR identifies 80% cement bond index across the Garden Gulch Member confining zone from 2708 feet to 5958 feet.

An EPA analysis of the Canvasback No. 15-22-8-17 CBL/GR did identify 80% bond index cement bond across the Garden Gulch Member confining zone, pursuant to standards of Region 8 GROUND WATER SECTION GUIDANCE NO. 34: Cement Bond Logging Techniques and Interpretation. Therefore, it has been determined that the cement in this well provides an effective barrier to significant upward movement of fluids through vertical channels adjacent to the wellbore, pursuant to 40 CFR 146.8 (a) (2).

#### PART II. A. CONSTRUCTION REQUIREMENTS FOR ADDITIONAL WELLS

#### Tubing and Packer:

(Condition 3)

For injection purposes, the **Canvasback No. 15-22-8-17** shall be equipped with 2-7/8 tubing with a packer to be set at a depth no higher than 100 feet above the top perforation.

#### Formation Testing and Logging

(Condition 6)

- (a) Upon conversion of the Canvasback No. 15-22-8-17, the permittee is required to determine the injection zone fluid pore pressure (static bottom hole pressure) prior to commencement of enhanced recovery injection operation. The results of this test shall be submitted to the EPA.
- (b) A Step-Rate Test (SRT) shall be performed on the Canvasback No. 15-22-8-17 within three (3) to six (6) months after injection operations are initiated and the results submitted to the EPA. The permittee may contact the EPA prior to conducting the SRT to acquire the most current Guidance for conducting the SRT.

#### PART II. B.

#### Corrective Action

As of February 2005, there are four (4) active Green River oil wells within or proximate to the one-quarter (1/4) mile radius around the Canvasback No. 15-22-8-17-8-17. No wells need Corrective Action.

#### Garden Gulch-Douglas Creek Members Oil Wells:

#### Canvasback No. 14-22-8-17:

**SE SW Sec. 22 -T8S-R17E** 

Top Garden Gulch Member:

4183 feet

Garden Gulch Confining Zone:

4119 feet to 4183 feet

Top 80% EPA Cement Bond:

3800 feet - 4100 feet and 4216 feet - 4238

feet

Top Douglas Creek Member:

5168 feet

Total Depth (Driller):

6300 feet in Douglas Creek Member

The 64-foot confining shale (4119 feet to 4183 feet) overlying the top of the Garden Gulch Member (4183 feet) is not protected by 80% bond index cement bond. This lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the well bore. The permittee will be required to inspect the surface of this location for fluid leaks on a weekly basis. Any observation of surface leakage may be considered as noncompliance with the Canvasback No. 15-22-8-17 Permit. The Canvasback No. 15-22-8-17 shall suspend operations immediately, and will stay suspended until the noncompliance has been resolved, and renewed injection has been approved in writing by the Director.

#### Canvasback No. 16-22-8-17:

**SE SE Sec. 22-T8S-R17E** 

Top Garden Gulch Member:

4198 feet

Garden Gulch Confining Zone:

4154 feet to 4198 feet

Top 80% EPA Cement Bond:

3884 feet - 4128 feet and 4228 feet - 4362

feet.

Top Douglas Creek Member:

5176 feet

Total Depth (Driller):

6379 feet in Douglas Creek Member.

The 44-foot confining shale (4154 feet to 4198 feet) overlying the top of the Garden Gulch Member (4198 feet) is not protected by 80% bond index cement bond. This lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the well bore. The permittee will be required to inspect the surface of this location for fluid leaks on a weekly basis. Any observation of surface leakage may be considered as noncompliance with the Canvasback No. 15-22-8-17 Permit. The Canvasback No. 15-22-8-17 shall suspend operations immediately, and will stay suspended until the noncompliance has been resolved, and renewed injection has been approved in writing by the Director.

#### Greater Boundary No. 2-27-8-17:

**NW NE Sec. 27-T8S-R17E** 

Top Garden Gulch Member:

4106 feet

Garden Gulch Confining Zone:

4052 feet to 4106 feet

Top 80% EPA Cement Bond:

4074 feet to 4092 feet

Top Douglas Creek Member:

5098 feet

Total Depth (Driller):

6304 feet in Douglas Creek Member

The 54-foot Confining Zone contains eighteen (18) feet of continuous 80% bond index cement bond. This annulus cement is considered adequate to confine the injectate to the authorized injection interval.

#### Monument Federal No. 33-22-8-17:

**NW SE Sec. 22-T8S-R17E** 

Top Garden Gulch Member:

4194 feet

Garden Gulch Confining Zone:

4157 feet to 4194 feet

Top 80% EPA Cement Bond:

4153 feet to 4171 feet

Total Depth (Driller):

6350 feet

The 37-foot Confining Zone contains eighteen (18) feet of continuous 80% bond index cement bond. This annulus cement is considered adequate to confine the injectate to the authorized injection interval.

#### PART II. C.

#### Prior to Commencing Injection (Additional Wells)

(Condition 2)

<u>Canvasback No. 15-22-8-17</u>: This document is being issued without authority to inject. Prior to beginning injection, the operator is required to submit the following information for EPA review and written approval:

- A successful mechanical integrity test (MIT) demonstrating Part I Internal MI (Enclosed);
- a pore pressure calculation of the proposed injection zone; and an
- EPA Form No. 7520-12 (Well Rework Record, enclosed).

Injection Interval (Condition 3)

Injection shall be limited to the gross Garden Gulch, Douglas Creek and Basal Carbonate Members of the Green River Formation from 4200 feet (KB) to the top of the Wasatch Formation, estimated to be 6575 feet (KB).

#### **Injection Pressure Limitation**

(Condition 4)

Pursuant to Final Area Permit UT20855-00000, Part II. Section C. 5. (b) (1), the maximum allowable injection pressure (MAIP) "...shall be determined for each Area Permit well as:" "(1) Using sand fracture treatment data, the EPA will calculate the MIP for each treated (sand/frac) interval using the instantaneous shut-in pressure (ISIP) from that interval. The minimum MIP calculated shall be the initial maximum surface injection pressure for that well;". A fracture gradient (FG) of 0.740 psi/ft is the minimum value FG calculated from the three (3) ISIP sand/frac treatments.

Until such time that a <u>step-rate injectivity test (SRT)</u> has been performed, reviewed, and approved by the EPA, the initial maximum allowable injection pressure (MAIP) for the Canvasback No. 15-22-8-17 shall not exceed 1755 psig.

MAIP = [FG - (0.433)(SG) D

FG = 0.740 psi/ft (Calculated from sd/frac ISIP)
SG = 1.005
D = 5755 feet. Top perforation.

MAIP = [0.740 - (0.433)(1.005) 5755

MAIP = 1754 psig, but rounded up to 1755 psig.

Final Area Permit (UT20855-00000), has a provision whereby the operator may request an increase, or decrease, in the maximum surface injection pressure.

#### PART II. F.

#### Demonstration of Financial Responsibility:

(Condition 1)

The current plugging and abandonment cost for the Canvasback No. 15-22-8-17 is estimated to be \$33,025.00. The applicant has chosen to demonstrate financial responsibility via a **Financial Statement** that has been reviewed and approved by the EPA.

#### PART III. E.

#### Reporting of Noncompliance:

(Condition 10)

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) <u>Compliance Schedules</u>. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted <u>no later than thirty (30) days following each schedule date.</u>
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned tp prevent or reduce recurrence of the noncompliance.

#### <u>Twenty-Four Hour Noncompliance Reporting</u>:

(Condition 11)

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the EPA Region VIII UIC Program Compliance and Enforcement Director, or by contacting the Region VIII Emergency Operations Center at 303.293.1788 if calling from outside EPA Region VIII. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

#### Oil Spill and Chemical Release Reporting:

(Condition 12)

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting

the National Response Center (NRC) 1.800.424.8802 or 202.267.2675, or through the NRC website at <a href="http://www.nrc.uscg.mil/index.htm">http://www.nrc.uscg.mil/index.htm</a>.

#### Other Noncompliance:

(Condition 13)

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III. 10. c. ii. of this Permit.

Other Information: Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

#### APPENDIX C

<u>PLUGGING AND ABANDONMENT</u>: The Plugging and Abandonment (P&A) Plan (Application Attachment Q-2) submitted by the applicant has been reviewed and approved by the EPA. The P&A Plan is now consistent with EPA requirements to protect all USDWs. The permittee will place 9.2 ppg plugging gel or bentonite mud between all cement plugs.

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) at 5660 feet. Place 100 feet of Class "G" cement on top of CIBP.
- PLUG NO. 2: Set a cement plug inside of the 5-1/2 inch casing from 2000 feet to 2200 feet over a water zone.
- PLUG NO. 3: Perforate 4 jet shots per foot at 361 feet. Set Class "G" cement inside of 5-1/2 inch casing and in the 5-1/2 inch X 8-5/8 inch annulus from 361 feet to the surface.

This authorization <u>for well conversion</u> of the Canvasback No.15-22-8-17 to an injection well becomes effective upon signature.

Date: MAR 11 2005

Cawl S. Carybell for Stephen S. Tuber

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION VIII**

#### 999 18th STREET - SUITE 500 DENVER, COLORADO 80202-2466

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 39

Pressure testing injection wells for Part I (internal)

Mechanical Integrity

FROM: Tom Pike, Chief

UIC Direct Implementation Section

TO:

All Section Staff

Montana Operations Office

#### Introduction

The Underground Injection Control (UIC) regulations require that an injection well have mechanical integrity at all times (40 CFR 144.28 (f) (2) and 40 CFR 144.51 (q) (1)). A well has mechanical integrity (40 CFR 146.8) if:

- (1) There is no significant leak in the tubing, casing or packer; and
- (2) There is no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection wellbore.

Definition: Mechanical Integrity Pressure Test for Part I. A pressure test used to determine the integrity of all the downhole components of an injection well, usually tubing, casing and packer. It is also used to test tubing cemented in the hole by using a tubing plug or retrievable packer. Pressure tests must be run at least once every five If for any reason the tubing/packer is pulled, the injection well is required to pass another mechanical integrity test of the tubing casing and packer prior to recommencing injection regardless of when the last test was Tests run by operators in the absence of an EPA conducted. inspector must be conducted according to these procedures and recorded on either the attached form or an equivalent form containing the necessary information. A pressure recording chart documenting the actual annulus test pressures must be attached to the form.

This guidance addresses making a determination of Part I of Mechanical Integrity (no leaks in the tubing, casing or packer). The Region's policy is: 1) to determine if there are significant leaks in the tubing, casing or packer; 2) to assure that the casing can withstand pressure similar to that which

would be applied if the tubing or packer fails; 3) to make the Region's test procedure consistent with the procedures utilized by other Region VIII Primacy programs; and 4) to provide a procedure which can be easily administered and is applicable to all class I and II wells. Although there are several methods allowed for determining mechanical integrity, the principal method involves running a pressure test of the tubing/casing annulus. Region VIII's procedure for running a pressure test is intended to aid UIC field inspectors who witness pressure tests for the purpose of demonstrating that a well has Part I of Mechanical Integrity. The guidance is also intended as a means of informing operators of the procedures required for conducting the test in the absence of an EPA inspector.

#### Pressure Test Description

#### Test Frequency

The mechanical integrity of an injection well must be maintained at all times. Mechanical integrity pressure tests are required at least every five (5) years. If for any reason the tubing/packer is pulled, however, the injection well is required to pass another mechanical integrity test prior to recommencing injection regardless of when the last test was conducted. The Regional UIC program must be notified of the workover and the proposed date of the pressure test. The well's test cycle would then start from the date of the new test if the well passes the test and documentation is adequate. Tests may be required on a more frequent basis depending on the nature of the injectate and the construction of the well (see Section guidance on MITs for wells with cemented tubing and regulations for Class I wells).

Region VIII's criteria for well testing frequency is as follows:

- 1. Class I hazardous waste injection wells; initially [40 CFR 146.68(d)(1)] and annually thereafter;
- Class I non-hazardous waste injection wells; initially and every two (2) years thereafter, except for old permits (such as the disposal wells at carbon dioxide extraction plants which require a test at least every five years);
- 3. Class II wells with tubing, casing and packer; initially and at least every five (5) years thereafter;
- 4. Class II wells with tubing cemented in the hole; initially and every one (1) or two (2) years thereafter

- depending on well specific conditions (See Region VIII UIC Section Guidance #36);
- 5. Class II wells which have been temporarily abandoned (TAd) must be pressure tested after being shut-in for two years; and
- 6. Class III uranium extraction wells; initially.

#### Test Pressure

To assure that the test pressure will detect significant leaks and that the casing is subjected to pressure similar to that which would be applied if the tubing or packer fails, the tubing/casing annulus should be tested at a pressure equal to the maximum allowed injection pressure or 1000 psig whichever is less. The annular test pressure must, however, have a difference of at least 200 psig either greater or less than the injection tubing pressure. Wells which inject at pressures of less than 300 psig must test at a minimum pressure of 300 psig, and the pressure difference between the annulus and the injection tubing must be at least 200 psi.

#### <u>Test Criteria</u>

- 1. The duration of the pressure test is 30 minutes.
- 2. Both the <u>annulus and tubing pressures should be</u> monitored and recorded every five (5) minutes.
- 3. If there is a pressure change of 10 percent or more from the initial test pressure during the 30 minute duration, the well has failed to demonstrate mechanical integrity and should be shut-in until it is repaired or plugged.
- 4. A pressure change of 10 percent or more is considered significant. If there is no significant pressure change in 30 minutes from the time that the pressure source is disconnected from the annulus, the test may be completed as passed.

#### Recordkeeping and Reporting

The test results must be recorded on the attached form. The annulus pressure should be recorded at five (5) minute intervals. Tests run by operators in the absence of an EPA inspector must be conducted according to these procedures and recorded on the attached form or an equivalent form and a pressure recording

chart documenting the actual annulus test pressures must be attached to the submittal. The tubing pressure at the beginning and end of each test must be recorded. The volume of the annulus fluid bled back at the surface after the test should be measured and recorded on the form. This can be done by bleeding the annulus pressure off and discharging the associated fluid into a five gallon container. The volume information can be used to verify the approximate location of the packer.

#### Procedures for Pressure Test

- 1. Scheduling the test should be done at least two (2) weeks in advance.
- 2. Information on the well completion (location of the packer, location of perforations, previous cement work on the casing, size of casing and tubing, etc.) and the results of the previous MIT test should be reviewed by the field inspector in advance of the test. Regional UIC Guidance #35 should also be reviewed. Information relating to the previous MIT and any well workovers should be reviewed and taken into the field for verification purposes.
- 3. All Class I wells and Class II SWD wells should be shut-in prior to the test. A 12 to 24-hour shut-in is preferable to assure that the temperature of the fluid in the wellbore is stable.
- 4. Class II enhanced recovery wells may be operating during the test, but it is recommended that the well be shut-in if possible.
- 5. The operator should fill the casing/tubing annulus with inhibited fluid at least 24 hours in advance, if possible. Filling the annulus should be undertaken through one valve with the second valve open to allow air to escape. After the operator has filled the annulus, a check should be made to assure that the annulus will remain full. If the annulus can not maintain a full column of fluid, the operator should notify the Director and begin a rework. The operator should measure and report the volume of fluid added to the annulus. If not already the case, the casing/tubing valves should be closed, at least, 24 hours prior to the pressure test.

Following steps are at the well:

6. Read tubing pressure and record on the form. If the

well is shut-in, the reported information on the actual maximum operating pressure should be used to determine test pressures.

- 7. Read pressure on the casing/tubing annulus and record value on the form. If there is pressure on the annulus, it should be bled off prior to the test. If the pressure will not bleed-off, the guidance on well failures (Region VIII UIC Section Guidance #35) should be followed.
- 8. Ask the operator for the date of the last workover and the volume of fluid added to the annulus prior to this test and record information on the form.
- 9. Hook-up well to pressure source and apply pressure until test value is reached.
- 10. Immediately disconnect pressure source and start test time (If there has been a significant drop in pressure during the process of disconnection, the test may have to be restarted). The pressure gages used to monitor injection tubing pressure and annulus pressure should have a pressure range which will allow the test pressure to be near the mid-range of the gage. Additionally, the gage must be of sufficient accuracy and scale to allow an accurate reading of a 10 percent change to be read. For instance, a test pressure of 600 psi should be monitored with a 0 to 1000 psi gage. The scale should be incremented in 20 psi increments.
- 11. Record tubing and annulus pressure values every five (5) minutes.
- 12. At the end of the test, record the final tubing pressure.
- 13. If the test fails, check the valves, bull plugs and casing head close up for possible leaks. The well should be retested.
- 14. If the second test indicates a well failure, the Region should be informed of the failure within 24 hours by the operator, and the well should be shut-in within 48 hours per Headquarters guidance #76. A follow-up letter should be prepared by the operator which outlines the cause of the MIT failure and proposes a potential course of action. This report should be submitted to EPA within five days.

- 15. Bleed off well into a bucket, if possible, to obtain a volume estimate. This should be compared to the calculated value obtained using the casing/tubing annulus volume and fluid compressibility values.
- 16. Return to office and prepare follow-up.

#### Alternative Test Option

While it is expected that the test procedure outlined above will be applicable to most wells, the potential does exist that unique circumstances may exist for a given well that precludes or makes unsafe the application of this test procedure. In the event that these exceptional or extraordinary conditions are encountered, the operator has the option to propose an alternative test or monitoring procedures. The request must be submitted by the operator in writing and must be approved in writing by the UIC-Implementation Section Chief or equivalent level of management.

Attachment

## Mechanical Integrity Test

Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency

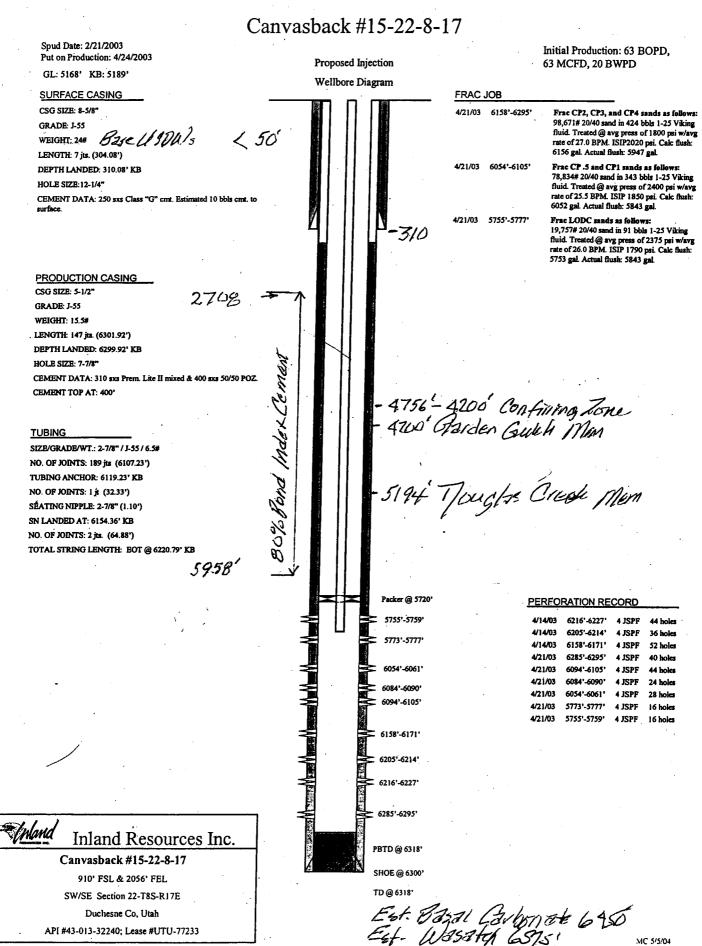
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW

999 18th Street, Suite 500 Denver, CO 80202-2466

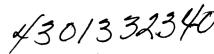
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Initial test for permit?	1	] Yes	, [	] No			
Test after well rework?	[	] Yes	. [	] No		•	
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Pre-test casing/tubing annulus pressure:							
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MIT DATA TABLE	Test #1	Test #2	Test #3
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CASING / TUBING	ANNULUS	PRESSURE	
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10 minutes	psig	psig	psig
15 minutes	psig	psig	psig
20 minutes	psig	psig	psig
25 minutes	psig	psig	psig
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MC 5/5/04





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18<sup>™</sup> STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08
MAR 2 2 2005

RECEIVED MAR 2 3 2005

DIV. OF OIL, GAS & MINING

Ref: 8P-W-GW

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Mr. Mike Guinn Vice President - Operations Newfield Production Co. Route 3 - Box 3630 Myton, Utah 84502 Accepted by the Accepted Division Mining ONLY
Oil Gas and Mining ONLY
FOR RECORD ONLY

RE: ADDITIONAL WELL TO AREA PERMIT Canvasback Area Permit: UT20855-00000

Canvasback Federal No. 13-23-8-17

Well ID: 20855-06520

NW SW Sec. 23 - T8S - 17E

Duchesne County, Utah

Dear Mr. Guinn:

The Newfield Production Co. (Newfield) request to convert a former Green River Formation oil well, the Canvasback Federal No. 13-23-8-17, to a Garden Gulch-Douglas Creek-Basal Carbonate Members of the Green River Formation enhanced recovery injection well in the Canvasback Area Permit is hereby authorized. The proposed Canvasback Federal No. 13-23-8-17 Class II enhanced recovery injection well is within the exterior boundary of the Canvasback Area Permit UT20855-00000; is within the exterior boundary of the Uintah & Ouray Indian Reservation; and the addition is being made under the authority of 40 CFR § 144.33 (c) and the terms of the Area Permit. Unless specifically mentioned in the enclosed Authorization For An Additional Well, all terms and conditions of the original Area Permit will apply to the conversion, operation, monitoring, and plugging and abandonment of the Canvasback Federal No. 13-23-8-17.

Prior to beginning injection, the Environmental Protection Agency (EPA) requires that Newfield submit for review and approval (1) the results of a Part I (Internal) mechanical integrity test (Guidance enclosed), (2) a pore pressure calculation of the injection interval, (3) an EPA Form No. 7520-12 (Well Rework Record, enclosed).

Part II. Section C. Condition No. 5 (b) (1), (Injection Pressure Limitation), Canvasback Area Permit (UT20855-00000), cites the method by which the maximum initial allowable injection pressure (MAIP) shall be calculated for each Additional Well to the Canvasback Area Permit. As a result, the MAIP for the Canvasback Federal No. 13-23-8-17 shall not exceed 1365 psig. The Canvasback Area Permit, Part II. C. 5., provides an opportunity for the permittee to request an increase, or decrease, in the initial maximum surface injection pressure.

Please be aware that Newfield does not have authorization to begin injection into the Canvasback Federal No. 13-23-8-17 until the <u>Prior to Commencing Injection</u> requirements, listed above, have been submitted and evaluated by the EPA, and Newfield has received written authorization to begin injection from the Assistant Regional Administrator, or the Assistant Regional Administrator's authorized representative.

If Newfield has any questions, please call Mr. Dan Jackson at (800) 227-8917 (Ext. 6155), or in the Denver area at (303) 312-6155. Please submit the required pre-authorization to inject data to <u>ATTENTION: DAN JACKSON</u>, at the letterhead address, citing <u>MAIL CODE:</u> 8P-W-GW very prominently.

Sincerely,

Stephen S. Tuber

**Assistant Regional Administrator** 

Carl L. Congbell for

Office of Partnerships and Regulatory Assistance

enclosures: Authorization For Conversion of An Additional Well

EPA Form No. 7520-12 (Well Rework Record)

Guidance No. 39: Part I Mechanical Integrity (Internal)

Schematic Diagram: Proposed Conversion

cc w/ enclosures: Maxine Natchees

Chairperson

Uintah & Ouray Business Committee

Ute Indian Tribe

Elaine Willie Environmental Coordinator Ute Indian Tribe

Chester Mills
Superintendent
Bureau of Indian Affairs
Uintah & Ouray Indian Agency

David Gerbig Operations Engineer Newfield Production Company

Gil Hunt Technical Services Manager State of Utah - Natural Resources

Kirk Fleetwood Sr. Petroleum Engineer Bureau of Land Management Vernal District



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18<sup>TH</sup> STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

# AUTHORIZATION FOR AN ADDITIONAL WELL TO THE CANVASBACK AREA PERMIT: UT20855-00000

The Environmental Protection Agency (EPA) authorizes the inclusion of an additional enhanced recovery injection well to the Canvasback Area Permit No. UT20855-00000, as authorized by 40 CFR § 144.33 (c). The additional well is described as:

WELL NAME: CANVASBACK FEDERAL NO. 13-23-8-17

WELL PERMIT NUMBER: UT20855-06520

SURFACE LOCATION:

306' FSL & 642' FWL (SW SW)

Sec. 22 - T8S - R17E Duchesne County, Utah.

This well is subject to all provisions of the original Canvasback Area Permit No. UT20855-00000, and subsequent Modifications, unless specifically detailed below:

<u>UNDERGROUND SOURCE OF DRINKING WATER (USDW)</u>: The base of the USDW (Total Dissolved Solids less than 10,000 mg/l) in the Canvasback Federal No.13-23-8-17 occurs within the Uinta Formation less than 80 feet from ground level (GL). The source for the location of the base of the USDW is the STATE OF UTAH: PUBLICATION NO. 2. BASE OF MODERATELY SALINE GROUND WATER IN THE UINTA BASIN, UTAH. Surface casing was set at 310 feet kelly bushing (KB) and cemented to the surface.

Reference: <a href="http://NRWRT1.NR.STATE.UT.US...">http://NRWRT1.NR.STATE.UT.US...</a> Water Rights...Queries...POD: Within the one-quarter (1/4) mile Area-of-Review (AOR) around the Canvasback Federal No.13-23-8-17 there are no reservoirs, streams, springs or wells.

#### **WATER ANALYSES:**

Produced Green River Formation Water: (7/15/04) 13,367 mg/l TDS.

Source Water: Johnson Water District Reservoir. (3/31/04) 400 mg/l TDS.

Blended Injectate: (7/21/01) 7761 mg/l TDS.

# NFINING ZONE REVIEW: CANVASBACK FEDERAL NO. 3-23-8-17

The EPA has authorized the gross interval from the top of the Garden Gulch Member to the top of the Wasatch as the enhanced recovery injection interval within the Canvasback Area Permit. Overlying the top of the Garden Gulch Member (4178 feet), in the Canvasback Federal No. 13-23-8-17, are forty-six (46) feet (4132 feet to 4178 feet) of Green River Formation black, slightly silty, impervious shale which forms an effective lithologic confining zone.

## **INJECTION ZONE REVIEW: CANVASBACK FEDERAL NO. 13-23-8-17**

The Canvasback Final Area Permit (Effective August 18, 2000) authorized injection into the Garden Gulch and Douglas Creek Members of the Green River Formation. By Major Permit Modification No. 3 (Effective September 10, 2003) the EPA authorized the gross Green River Formation Garden Gulch-Douglas Creek-Basal Carbonate Members as the enhanced recovery injection interval for the Canvasback Area Permit. This Modification also recognized the Federal No. 1-26 (NE NW Sec. 26 - T8S - R17E), UIC Permit No. UT20702-04671, as the TYPE WELL for identifying the tops of the Garden Gulch Member, the Douglas Creek Member, the Basal Carbonate Member, the top of the Wasatch Formation and the "Confining Zone" overlying the top of the Garden Gulch Member.

The authorized injection zone for the Canvasback Federal No. 13-23-8-17 will be from the Garden Gulch Member (4178 feet) to the top of the Wasatch Formation (Estimated to be 6543 feet).

Lithologically, the gross authorized enhanced recovery injection interval, Garden Gulch to the top of the Wasatch Formation, is fluvial and lacustrine shale, fluvial and lacustrine sandstone, lacustrine marlstone, and limestone. The Uinta and Green River Formations are predominantly non-lacustrine fluvial shale and sandstone on the basin margins, whereas lacustrine deposition predominates in the central basin area for these two formations. The Wasatch Formation is predominantly fluvial, except for increasing minor lacustrine deposition in the central basin area.

## WELL CONSTRUCTION REVIEW: CANVASBACK FEDERAL NO. 13-23-8-17.

SURFACE CASING: 8-5/8 inch casing is set at 316 feet (KB) in a 12-1/4 inch hole, using 140 sacks of Class "G" cement circulated to the surface. The base of the USDW is less than eighty (80) feet from ground level.

LONGSTRING CASING:

5-1/2 inch casing is set at 6408 feet (KB) in a 7-7/8 inch hole, and cemented with 320 sacks of Premium Lite II mixed and 400 sacks of 50/50 Pozmix.

The operator identifies the top of cement at 290 feet.

The EPA analysis of the CBL/GR identifies 80% cement bond index across the Garden Gulch Member confining zone from 4122 feet to 4174 feet.

An EPA analysis of the Canvasback Federal No. 13-23-8-17 CBL/GR did identify 80% bond index cement bond across the Garden Gulch Member confining zone, pursuant to standards of Region 8 GROUND WATER SECTION GUIDANCE NO. 34: Cement Bond Logging Techniques and Interpretation. Therefore, it has been determined that the cement in this well provides an effective barrier to significant upward movement of fluids through vertical channels adjacent to the wellbore, pursuant to 40 CFR 146.8 (a) (2).

## PART II. A. CONSTRUCTION REQUIREMENTS FOR ADDITIONAL WELLS

#### Tubing and Packer:

(Condition 3)

For injection purposes, the Canvasback Federal No. 13-23-8-17 shall be equipped with 2-7/8 tubing with a packer to be set at a depth no higher than 100 feet above the top perforation.

#### Formation Testing and Logging

(Condition 6)

- (a) Upon conversion of the Canvasback Federal No. 13-23-8-17, the permittee is required to determine the injection zone fluid pore pressure (static bottom hole pressure) prior to commencement of enhanced recovery injection operation. The results of this test shall be submitted to the EPA.
- (b) A Step-Rate Test (SRT) shall be performed on the Canvasback Federal No. 13-23-8-17 within three (3) to six (6) months after injection operations are initiated and the results submitted to the EPA. The permittee may contact the EPA prior to conducting the SRT to acquire the most current Guidance for conducting the SRT.

#### PART II. B.

#### Corrective Action

As of March 2005, there are two (2) active Green River oil wells within or proximate to the one-quarter (1/4) mile radius around the Canvasback Federal No. 13-23-8-17-8-17. No wells need Corrective Action.

## Garden Gulch-Douglas Creek Members Oil Wells:

Greater Boundary No. 4-26-8-17:

NW NW Sec. 26 -T8S-R17E

Top Garden Gulch Member:

4100 feet

Garden Gulch Confining Zone:

4055 feet to 4100 feet

Top 80% EPA Cement Bond:

4369 feet - 4400 feet

Top Douglas Creek Member:

5104 feet

Total Depth (Driller):

6332 feet in Douglas Creek Member

The 45-foot confining shale (4055 feet to 4100 feet) overlying the top of the Garden Gulch Member (4183 feet) is not protected by 80% bond index cement bond. This lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the well bore. The permittee will be required to inspect the surface of this location for fluid leaks on a weekly basis. Any observation of surface leakage may be considered as noncompliance with the Canvasback Federal No. 13-23-8-17 Permit. The Canvasback Federal No.13-23-8-17 shall suspend operations immediately, and will stay suspended until the noncompliance has been resolved, and renewed injection has been approved in writing by the Director.

Canvasback No. 16-22-8-17:

**SE SE Sec. 22-T8S-R17E** 

Top Garden Gulch Member:

4198 feet

Garden Gulch Confining Zone:

4154 feet to 4198 feet

Top 80% EPA Cement Bond:

3844 feet - 4128 feet and 4228 feet - 4362

feet.

Top Douglas Creek Member:

Total Depth (Driller):

5176 feet 6379 feet in Douglas Creek Member.

The 44-foot confining shale (4154 feet to 4198 feet) overlying the top of the Garden Gulch Member (4198 feet) is not protected by 80% bond index cement bond. This lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the well bore. The permittee will be required to inspect the surface of this location for fluid leaks on a weekly basis. Any observation of surface leakage may be considered as noncompliance with the Canvasback Federal No. 13-23-8-17 Permit. The Canvasback Federal No. 13-23-8-17 shall suspend operations immediately, and will stay suspended until the noncompliance has been resolved, and renewed injection has been approved in writing by the Director.

#### PART II. C.

## Prior to Commencing Injection (Additional Wells)

(Condition 2)

Canvasback Federal No. 13-23-8-17: This document is being issued without authority to inject. Prior to beginning injection, the operator is required to submit the following information for EPA review and written approval:

- A successful mechanical integrity test (MIT) demonstrating Part I Internal MI (Enclosed);
- a pore pressure calculation of the proposed injection zone; and an
- EPA Form No. 7520-12 (Well Rework Record, enclosed).

#### Injection Interval

(Condition 3)

Injection shall be limited to the gross Garden Gulch, Douglas Creek and Basal Carbonate Members of the Green River Formation from 4178 feet (KB) to the top of the Wasatch Formation, estimated to be 6543 feet (KB).

## Injection Pressure Limitation

(Condition 4)

Pursuant to Final Area Permit UT20855-00000, Part II. Section C. 5. (b), the maximum allowable injection pressure (MAIP) "...shall be determined for each Area Permit well as:" "(1) Using sand fracture treatment data, the EPA will calculate the MIP for each treated (sand/frac) interval using the instantaneous shut-in pressure (ISIP) from that interval. The minimum MIP calculated shall be the initial maximum surface injection pressure for that well;". A fracture gradient (FG) of 0.720 psi/ft is the minimum value FG calculated from the six (6) ISIP sand/frac treatments. The 0.720 FG is acceptable for calculation of the initial Maximum Allowable Injection Pressure.

Until such time that a step-rate injectivity test (SRT) has been performed, reviewed, and approved by the EPA, the initial maximum allowable injection pressure (MAIP) for the Canvasback Federal No. 13-23-8-17 shall not exceed 1365psig.

MAIP = [FG - (0.433)(SG) D]

0.720 psi/ft (Calculated from sd/frac ISIP) FG

1.005 SG

4786 feet. Top perforation. D [0.740 - (0.433)(1.005) 5755MAIP =

1363 psig, but rounded up to 1365 psig. MAIP =

Final Area Permit (UT20855-00000), has a provision whereby the operator may request an increase, or decrease, in the maximum surface injection pressure.

#### PART II. F.

## Demonstration of Financial Responsibility:

(Condition 1)

The current plugging and abandonment cost for the Canvasback Federal No. 13-23-8-17 is estimated to be \$33,025.00. The applicant has chosen to demonstrate financial responsibility via a **Financial Statement** that has been reviewed and approved by the EPA.

#### PART III. E.

## Reporting of Noncompliance:

(Condition 10)

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) <u>Compliance Schedules</u>. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted <u>no later than thirty (30) days following each schedule date</u>.
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned tp prevent or reduce recurrence of the noncompliance.

## Twenty-Four Hour Noncompliance Reporting:

(Condition 11)

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the EPA Region VIII UIC Program Compliance and Enforcement Director, or by contacting the Region VIII Emergency Operations Center at 303.293.1788 if calling from outside EPA Region VIII. The following information shall be included in the verbal report:

(a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.

(b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

#### Oil Spill and Chemical Release Reporting:

(Condition 12)

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the National Response Center (NRC) 1.800.424.8802 or 202.267.2675, or through the NRC website at <a href="http://www.nrc.uscg.mil/index.htm">http://www.nrc.uscg.mil/index.htm</a>.

#### Other Noncompliance:

(Condition 13)

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III. 10. c. ii. of this Permit.

Other Information: Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

#### APPENDIX C

PLUGGING AND ABANDONMENT: The Plugging and Abandonment (P&A) Plan (Application Attachment Q-2) submitted by the applicant has been reviewed and modified by the EPA. The EPA has added Plug No. 4. The P&A Plan is now consistent with EPA requirements to protect all USDWs. The permittee will place 9.2 ppg plugging gel or bentonite mud between all cement plugs.

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) at 4690 feet. Place 100 feet of Class "G" cement on top of CIBP.
- PLUG NO. 2: Set a cement plug inside of the 5-1/2 inch casing from 2000 feet to 2200 feet over a water zone.
- PLUG NO. 3: Set a cement plug inside of the 5-1/2 inch casing from surface to a depth of 366 feet.
- PLUG NO. 4: Set a cement plug in the annulus between the 5-1/2 inch casing and the 8-5/8 inch casing from the surface to a depth of 366 feet.

This authorization for well conversion of the Canvasback Federal No.13-23-8-17 to a Class II enhanced recovery injection well becomes effective upon signature.

Date: MAR 2 2 2005

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

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SIGNATURE .

NAME AND OFFICIAL TITLE (Please type or print)

DATE SIGNED



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION VIII**

999 18th STREET - SUITE 500 DENVER, COLORADO 80202-2466

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 39

Pressure testing injection wells for Part I (internal)

Mechanical Integrity

FROM:

Tom Pike, Chief

UIC Direct Implementation Section

TO:

All Section Staff

Montana Operations Office

#### Introduction

The Underground Injection Control (UIC) regulations require that an injection well have mechanical integrity at all times (40 CFR 144.28 (f)(2) and 40 CFR 144.51 (q)(1)). A well has mechanical integrity (40 CFR 146.8) if:

- (1) There is no significant leak in the tubing, casing or packer; and
- (2) There is no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection wellbore.

Definition: Mechanical Integrity Pressure Test for Part I. A pressure test used to determine the integrity of all the downhole components of an injection well, usually tubing, casing and packer. It is also used to test tubing cemented in the hole by using a tubing plug or retrievable packer. Pressure tests must be run at least once every five years. If for any reason the tubing/packer is pulled, the injection well is required to pass another mechanical integrity test of the tubing casing and packer prior to recommencing injection regardless of when the last test was Tests run by operators in the absence of an EPA inspector must be conducted according to these procedures and recorded on either the attached form or an equivalent form containing the necessary information. A pressure recording chart documenting the actual annulus test pressures must be attached to the form.

This guidance addresses making a determination of Part I of Mechanical Integrity (no leaks in the tubing, casing or packer). The Region's policy is: 1) to determine if there are significant leaks in the tubing, casing or packer; 2) to assure that the casing can withstand pressure similar to that which

would be applied if the tubing or packer fails; 3) to make the Region's test procedure consistent with the procedures utilized by other Region VIII Primacy programs; and 4) to provide a procedure which can be easily administered and is applicable to all class I and II wells. Although there are several methods allowed for determining mechanical integrity, the principal method involves running a pressure test of the tubing/casing annulus. Region VIII's procedure for running a pressure test is intended to aid UIC field inspectors who witness pressure tests for the purpose of demonstrating that a well has Part I of Mechanical Integrity. The guidance is also intended as a means of informing operators of the procedures required for conducting the test in the absence of an EPA inspector.

#### Pressure Test Description

#### Test Frequency

The mechanical integrity of an injection well must be maintained at all times. Mechanical integrity pressure tests are required at least every five (5) years. If for any reason the tubing/packer is pulled, however, the injection well is required to pass another mechanical integrity test prior to recommencing injection regardless of when the last test was conducted. The Regional UIC program must be notified of the workover and the proposed date of the pressure test. The well's test cycle would then start from the date of the new test if the well passes the test and documentation is adequate. Tests may be required on a more frequent basis depending on the nature of the injectate and the construction of the well (see Section guidance on MITs for wells with cemented tubing and regulations for Class I wells).

Region VIII's criteria for well testing frequency is as follows:

- 1. Class I hazardous waste injection wells; initially [40 CFR 146.68(d)(1)] and annually thereafter;
- Class I non-hazardous waste injection wells; initially and every two (2) years thereafter, except for old permits (such as the disposal wells at carbon dioxide extraction plants which require a test at least every five years);
- 3. Class II wells with tubing, casing and packer; initially and at least every five (5) years thereafter;
- 4. Class II wells with tubing cemented in the hole; initially and every one (1) or two (2) years thereafter

- depending on well specific conditions (See Region VIII UIC Section Guidance #36);
- 5. Class II wells which have been temporarily abandoned (TAd) must be pressure tested after being shut-in for two years; and
- 6. Class III uranium extraction wells; initially.

#### Test Pressure

To assure that the test pressure will detect significant leaks and that the casing is subjected to pressure similar to that which would be applied if the tubing or packer fails, the tubing/casing annulus should be tested at a pressure equal to the maximum allowed injection pressure or 1000 psig whichever is less. The annular test pressure must, however, have a difference of at least 200 psig either greater or less than the injection tubing pressure. Wells which inject at pressures of less than 300 psig must test at a minimum pressure of 300 psig, and the pressure difference between the annulus and the injection tubing must be at least 200 psi.

#### Test Criteria

- 1. The duration of the pressure test is 30 minutes.
- 2. Both the <u>annulus and tubing pressures should be</u> monitored and recorded every five (5) minutes.
- 3. If there is a pressure change of 10 percent or more from the initial test pressure during the 30 minute duration, the well has failed to demonstrate mechanical integrity and should be shut-in until it is repaired or plugged.
- 4. A pressure change of 10 percent or more is considered significant. If there is no significant pressure change in 30 minutes from the time that the pressure source is disconnected from the annulus, the test may be completed as passed.

### Recordkeeping and Reporting

The test results must be recorded on the attached form. The annulus pressure should be recorded at five (5) minute intervals. Tests run by operators in the absence of an EPA inspector must be conducted according to these procedures and recorded on the attached form or an equivalent form and a pressure recording



chart documenting the actual annulus test pressures must be attached to the submittal. The tubing pressure at the beginning and end of each test must be recorded. The volume of the annulus fluid bled back at the surface after the test should be measured and recorded on the form. This can be done by bleeding the annulus pressure off and discharging the associated fluid into a five gallon container. The volume information can be used to verify the approximate location of the packer.

#### Procedures for Pressure Test

- 1. Scheduling the test should be done at least two (2) weeks in advance.
- Information on the well completion (location of the packer, location of perforations, previous cement work on the casing, size of casing and tubing, etc.) and the results of the previous MIT test should be reviewed by the field inspector in advance of the test. Regional UIC Guidance #35 should also be reviewed. Information relating to the previous MIT and any well workovers should be reviewed and taken into the field for verification purposes.
- 3. All Class I wells and Class II SWD wells should be shut-in prior to the test. A 12 to 24-hour shut-in is preferable to assure that the temperature of the fluid in the wellbore is stable.
- 4. Class II enhanced recovery wells may be operating during the test, but it is recommended that the well be shut-in if possible.
- 5. The operator should fill the casing/tubing annulus with inhibited fluid at least 24 hours in advance, if possible. Filling the annulus should be undertaken through one valve with the second valve open to allow air to escape. After the operator has filled the annulus, a check should be made to assure that the annulus will remain full. If the annulus can not maintain a full column of fluid, the operator should notify the Director and begin a rework. The operator should measure and report the volume of fluid added to the annulus. If not already the case, the casing/tubing valves should be closed, at least, 24 hours prior to the pressure test.

### Following steps are at the well:

6. Read tubing pressure and record on the form. If the



well is shut-in, the reported information on the actual maximum operating pressure should be used to determine test pressures.

- 7. Read pressure on the casing/tubing annulus and record value on the form. If there is pressure on the annulus, it should be bled off prior to the test. If the pressure will not bleed-off, the guidance on well failures (Region VIII UIC Section Guidance #35) should be followed.
- 8. Ask the operator for the date of the last workover and the volume of fluid added to the annulus prior to this test and record information on the form.
- 9. Hook-up well to pressure source and apply pressure until test value is reached.
- 10. Immediately disconnect pressure source and start test time (If there has been a significant drop in pressure during the process of disconnection, the test may have to be restarted). The pressure gages used to monitor injection tubing pressure and annulus pressure should have a pressure range which will allow the test pressure to be near the mid-range of the gage. Additionally, the gage must be of sufficient accuracy and scale to allow an accurate reading of a 10 percent change to be read. For instance, a test pressure of 600 psi should be monitored with a 0 to 1000 psi gage. The scale should be incremented in 20 psi increments.
- 11. Record tubing and annulus pressure values every five (5) minutes.
- 12. At the end of the test, record the final tubing pressure.
- 13. If the test fails, check the valves, bull plugs and casing head close up for possible leaks. The well should be retested.
- 14. If the second test indicates a well failure, the Region should be informed of the failure within 24 hours by the operator, and the well should be shut-in within 48 hours per Headquarters guidance #76. A follow-up letter should be prepared by the operator which outlines the cause of the MIT failure and proposes a potential course of action. This report should be submitted to EPA within five days.

- 15. Bleed off well into a bucket, if possible, to obtain a volume estimate. This should be compared to the calculated value obtained using the casing/tubing annulus volume and fluid compressibility values.
- 16. Return to office and prepare follow-up.

#### Alternative Test Option

While it is expected that the test procedure outlined above will be applicable to most wells, the potential does exist that unique circumstances may exist for a given well that precludes or makes unsafe the application of this test procedure. In the event that these exceptional or extraordinary conditions are encountered, the operator has the option to propose an alternative test or monitoring procedures. The request must be submitted by the operator in writing and must be approved in writing by the UIC-Implementation Section Chief or equivalent level of management.

Attachment

## Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: Test conducted by: Others present:	<u> </u>					Date:	<i>!</i>		
Well Name:Field:						ER SWD		AC TA UC	
Location: Sec								State	
Last MIT:/			axımum	Allov	wable Fie	33010.			
Is this a regularly sched					] No				
Initial test fo	r permit?	I	] Yes	. !	] No				
Test after well	l rework?	[	] Yes	. [	] No		•	•	
Well injecting du					] No	If Yes, rate:		bpd	
Pre-test casing/tubing annulu	s pressure	· _				psig			
MIT DATA TABLE	Test #1		·			Test #2		Test #3	
TUBING	PF	≀ES	SURE		·			•	
Initial Pressure				psig		1	psig		psig
End of test pressure	1							:	
				psig			nsig	:	psig
CASING / TUBING		٧N	ULUS						psig
		VN	ULUS		PRES	SURE			psig psig
CASING / TUBING		VIV	ULUS	psig	PRES	SURE	psig		
CASING / TUBING 0 minutes		VN	ULUS	psig	PRES	SURE	psig		psig
CASING / TUBING  0 minutes 5 minutes		<b>V</b> N	ULUS	psig psig psig	PRES	SURE	psig psig		psig psig
CASING / TUBING  0 minutes 5 minutes 10 minutes		<b>VIV</b>	ULUS	psig psig psig	PRES	SURE	psig psig psig		psig psig psig
CASING / TUBING  0 minutes 5 minutes 10 minutes 15 minutes		<u>VI</u> V	ULUS	psig psig psig psig	PRES	SURE	psig psig psig psig		psig psig psig psig
CASING / TUBING  0 minutes 5 minutes 10 minutes 15 minutes 20 minutes			ULUS	psig psig psig psig psig	PRES	SURE	psig psig psig psig psig psig		psig psig psig psig
CASING / TUBING  0 minutes 5 minutes 10 minutes 15 minutes 20 minutes 25 minutes		<u>V</u> N	ULUS	psig psig psig psig psig psig	PRES	SURE	psig psig psig psig psig psig psig		psig psig psig psig psig psig

]Fail

] Pass

**Pass** 

Pass

RESULT

]Fail

#### UT 20855-06520 Canvasback Federal #13-23-8-17

Spud Date: 4-9-03 Initial Production: 106BOPD. Put on Production: 5-6-03 Proposed Injection 74 MCFD, 6 BWPD Wellbore Diagram GL: 5147' KB: 5159' SURFACE CASING FRAC JOB CSG SIZE: 8-5/8" 4-30-03 6253'-6366' Frac CP 4,5 sand as follows: 50,714# 20/40 sand in 475 bbls Viking I-25 GRADE: J-55 fluid Treated @ avg press of 2044 psi w/avg rate of 28 BPM. ISIP 2180 psi. Calc flush: WEIGHT: 24# 6250 gal. Actual flush: 6174 gal 4-30-03 5924'-6127 Frac CP/LOLODC sand as follows: DEPTH LANDED: 316' KB 120,483# 20/40 sand in 882 bbls Viking I-25 HOLE SIZE: 12-1/4" fluid. Treated @ avg press of 1650 psi w/avg rate of 28.7. ISIP 1890 psi. Calc CEMENT DATA: 140 sxs Class "G" cmt mixed, est 1 bbls cmt to surf. flush: 5922 gal. Actual flush: 5844 gal. Cement Top @ 290' 4-30-03 5716'-5809' Frac UPLODC and BS sands as follows: -316 47,868# 20/40 sand in 463 bbls Viking I-25 fluid. Treated @ avg press of 1676 psi w/avg rate of 27.7 BPM. ISIP 1680 psi. Calc flush: 5714 gal. Actual flush: 5639 gal. Frac B.5 sands as follows: 5-01-03 5447'-5458' PRODUCTION CASING 34,936# 20/40 sand in 367 bbls Viking I-25 CSG SIZE: 5-1/2' fluid. Treated @ avg 1700 psi w/avg rate of 27.4 BPM. ISIP 1580 psi. . Calc GRADE: J-55 flush: 5445 gal. Actual flush: 5375 gal. WEIGHT: 15.58 5-01-03 5129'-5308' Frac D sands as follows: LENGTH: 149 jts. (6410') 56,300# 20/40 sand in 489 bbls Viking I-25 DEPTH LANDED: 6408' KB fluid. Treated @ avg 1578 psi w/avg rate of 27.2 BPM. ISIP 1495 psi. . Calc flush: 5127 HOLE SIZE: 7-7/8" gal. Actual flush: 5043 gal. CEMENT DATA: 320 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ 5-01-03 4786'-4814' Frac PR7 sands as follows: mixed 50,523,# 20/40 sand in 478 bbls Viking I-25 CEMENT TOP AT: 290 fluid. Treated @ avg 1876 psi w/avg rate of 27.8 BPM. ISIP 1720 psi. . Calc flush: 4784 gal. Actual flush: 4691 gal. **TUBING** SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5# Confining Zone 4132 - 4178' NO. OF JOINTS: 190 jts (6161.60') BOV6 Coment 4178 Garden Gulch Men TUBING ANCHOR: 6173.60' KB NO. OF JOINTS: 1 jts (32.48') SEATING NIPPLE: 2-7/8" (1.10') SN LANDED AT: 6208.88' KB NO. OF JOINTS: 2 its (64.80') Packer @ 4751 TOTAL STRING LENGTH: EOT @ 6275.23' w/12'KB 4786'-4814' 5129"-5138" 51411-51451 Dougles EV. Mon. 5203' PERFORATION RECORD 5225'-5234' 4-29-03 6358'-6366' 4 JSPF 5302'-5308' 32 holes 4-29-03 6348'-6352' 4 JSPF 16 holes 5447'-5458' 6298'-6304' 4-29-03 4 JSPF 24 holes 5716'-5726' 4-29-03 6253'-6258' 4 JSPF 20 holes 4-30-03 6123'-6127' 4 JSPF 16 holes 5804'-5809' 4-30-03 6062'-6071' 4 JSPF 36 holes 5924'-5932' 4-30-03 6046'-6057 4 JSPF 44 holes 6025'-6028' 4-30-03 6025'-6028' 4 JSPF 12 holes 4-30-03 5924'-5932' 4 JSPF 32 holes 6046'-6057' 4-30-03 5804'-5809' 4 JSPF 20 holes 6062'-6071' 4-30-03 5716'-5726' 4 JSPF 40 holes 6123'-6127' 5-01-03 5447'-5458' 6253'-6258' 5-01-03 5302'-5308' 4 JSPF 24 holes 5-01-03 5225'-5234' 6298'-6304' 5-01-03 5141 -5145 4 ISPE 16 holes 6348'-6352' 5-01-03 5129'-5138' 36 holes 5-01-03 4786'-4814' 4 JSPF 112 holes 6358'-6366' Inland Inland Resources Inc. PBTD @ 6390' Federal 13-23-8-17 306' FSL & 642' FWL - Est. Basal Carbonate Mem 6418" - Est Wasakh Fm. 6543' SWSW Section 23-T8S-R17E Duchesne Co, Utah

API #43-013-32340; Lease #UTU-76239

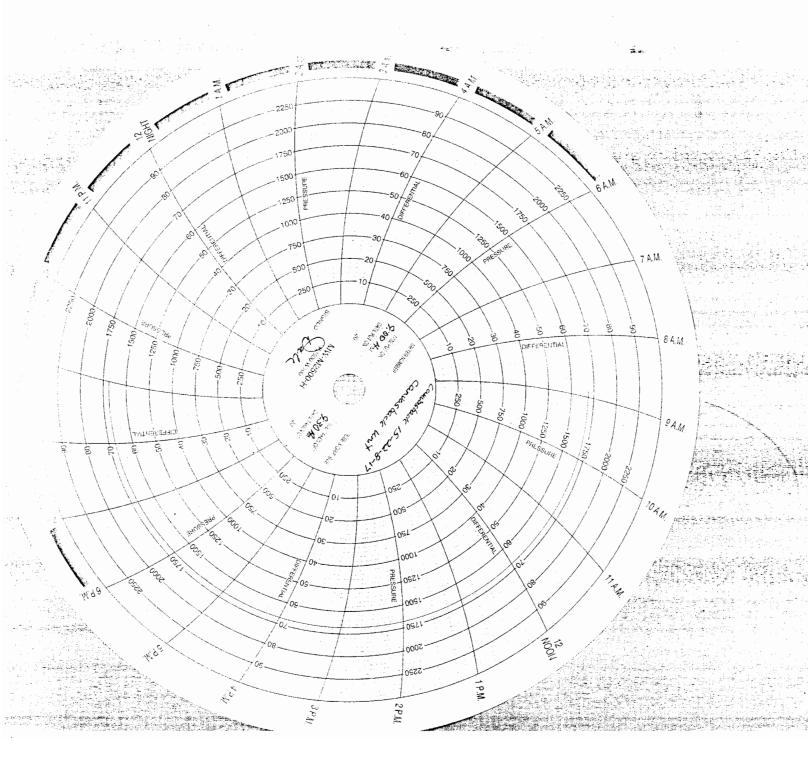
SIAIL OF CLAIR	
<b>DEPARTMENT OF NAT</b> URAL RESOURG	:
<b>DIVISION OF OIL, G</b> AS AND MIN	: %

5. LEASE DESIGNATION AND SERIAL I	NUMBER
UTU <b>77233</b>	

2	0	<b>DIVISION OF OIL, GAS AN</b>	D MINE	No. I	3. LEASE DESIGNATION AND SERIAL NUMBER; UTU77233
	SUNDRY	Y NOTICES AND REPO	DRTS (	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
) not	use this form for proposals to drill no	ew wells, significantly deepen existing wells below sterals. Use APPLICATION FOR PERMITED OR	current better		7 UNIT or CA AGREEMENT NAME: CANVASBACK UNIT
1. TY	PE OF WELL: OIL WELL	X GAS WELL OTHER			8. WELL NAME and NUMBER:
	OIL WELL	GAS WELL OTHER			CANVASBACK 15-22-8-17
	ME OF OPERATOR:  wfield Production Company				9. API NUMBER: 4301332240
3. AD	DRESS OF OPERATOR:			PHONE NUMBER	10. FIELD AND POOL, OR WILDCAT:
Rout	te 3 Box 3630 CI	TY Myton STATE	zig SJ ≟.	435.646.3721	Monument Butte
	CATION OF WELL: OTAGES AT SURFACE: 2056 FEL	910 FSL			COUNTY: Duchesne
QΤ	R/OTR, SECTION, TOWNSHIP, RANGE	. MERIDIAN: SW/SE, 22, T8S, R171			STATE: Utah
11.	CHECK APPRO	PRIATE BOXES TO INDICATI			RT, OR OTHER DATA
		1 (7.b)	E Oh 👵		
T	YPE OF SUBMISSION			TPE OF ACTION	
Ш	NOTICE OF INTENT	ACIDIZE	10		REPERFORATE CURRENT FORMATION
ш	(Submit in Duplicate)	ALTER CASING		": IREAT	SIDETRACK TO REPAIR WELL
	Approximate date work will	CASING REPAIR	□ N1 +	RUCTION	TEMPORARITLY ABANDON
		CHANGE TO PREVIOUS PLANS	691.	· CHANGE	TUBING REPAIR
		CHANGE TUBING	$\overline{\Box}$	7 ABAND <b>ON</b>	VENT OR FLAIR
X	SUBSEQUENT REPORT	CHANGE WELL NAME			WATER DISPOSAL
2	(Submit Original Form Only)	CHANGE WELL STATUS		OF CUT I PROPERTY	=
	Date of Work Completion:	COMMINGLE PRODUCING FORMATIONS		ON (START/STOP)	WATER SHUT-OFF
	05/05/2005			ION OF WELL SITE	OTHER: -
	• • • • • • • • • • • • • • • • • • • •	X CONVERT WELL TYPE		DE-DIFFERENT FORMATION	
12.	DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show a	all pertusers	and sincluding dates, depths, vo	olumes, etc.
pac On -	ker was inserted in bottom 4/20/05 Mr. Dan Jackson v	w/EPA was notified of the intent to och harted in the 1/2 hour test. No gove	onduct a rnmenar	Con the casing. On 4/22 cancies were able to with	anchor were removed and a 2/05 the casing was pressured to ness the test.
	·	FOR RECORD	Ted by the ONLY		
NAME	E (PLEASE PRINT) Krisha Russel			Production Clerk	
SIGNA	ATURE Frish	Russell		DATE 05/05/2005	
		•			

(This space for State use only)

RECEIVED MAY 0 9 2005



# Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency Underground Injection Control Program 999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness:			Date: <u>4 / 22</u> _				
Well Name: Cambasback 15-22-8-17 Type: ER SWD Status: AC TA UC Field: Cambasback unit  Location: Sec: 22 T 8 N / S R / 7 E/ W County: Duchesue State: UT Operator:  Last MIT: / / Maximum Allowable Pressure: PSIG							
Is this a regularly scheduled test? [ ] Yes [ ] No Initial test for permit? [ Yes [ ] No Test after well rework? [ ] Yes [ ] No Well injecting during test? [ ] Yes [ ] No If Yes, rate: bpd  Pre-test casing/tubing annulus pressure: psig							
MIT DATA TABLE TUBING	Test #1 PRESSURE		Test #2	Test #3			
Initial Pressure	300	psig	psig	psig			
End of test pressure	300	psig	psig	psig			
CASING / TUBING	ANNULUS		PRESSURE				
0 minutes	1680	psig	psig	psig			
5 minutes	1680	psig	psig	psig			
10 minutes	1680	psig	psig	psig			
15 minutes	1680	psig	psig	psig			
20 minutes	1680	psig	psig	psig			
25 minutes	1680	psig	psig	psig			
30 minutes	1680	psig	psig	psig			
minutes		psig	psig	psig			
minutes		psig	psig	psig			
RESULT	X Pass	[ ]Fail	[ ] Pass [ ]Fail	[ ] Pass [ ]Fail			

Does the annulus pressure build back up after the test? [ ] Yes [ ] No
MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness:	·	

FORM 3160-5 (September 2001)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM A	PPROVED
OMB No.	1004-0135
Expires Jan	uary 31.200

09:

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals

5. Lease Serial No.
UTU77233

U				6. If Indian, Allot	itee or Tribe Name.	
SUBMIT IN TRIPLICATE - Other Instructions on reverse side  1. Type of Well Oil Well Gas Well Other Injection well					7. If Unit or CA/Agreement, Name and/or No.  CANVASBACK UNIT  8. Well Name and No.	
Name of Operator     Newfield Production Company  3a. Address Route 3 Box 3630  3b. Phone No. (include are code)			CANVASBACK 15-22-8-17  9. API Well No. 4301332240			
Myton, UT 84052 435.646.3721 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)			10. Field and Pool, or Exploratory Area Monument Butte			
2056 FEL 910 FSL  SW/SE Section 22 T8S R17E				11. County or Parish, State  Duchesne,UT		
12. CHECK	APPROPRIATE BOX(I	ES) TO INIDICATE NA	ATURE OF N	OTICE, OR OT	THER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION					
□ Notice of Intent □ Subsequent Report □ Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Production(Start/Resume) Reclamation Recomplete Temporarily Abandon Water Disposal		Water Shut-Off Well Integrity Other Change Status, Put Well on Injection	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The above referenced well was put on injection at 2:00 p.m. on 6/24/05.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

I hereby certify that the foregoing is true and correct	Title Regulatory Specialist			
Name (Printed/Typed) Mandie Crozier				
Signature Juanthe way	Date 06/27/2005			
THIS SPACE FOR FED	ERAL OR STATE OFFI	TE USE		
Approved by	Title	Date		
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office			

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

JUN 2 9 2005

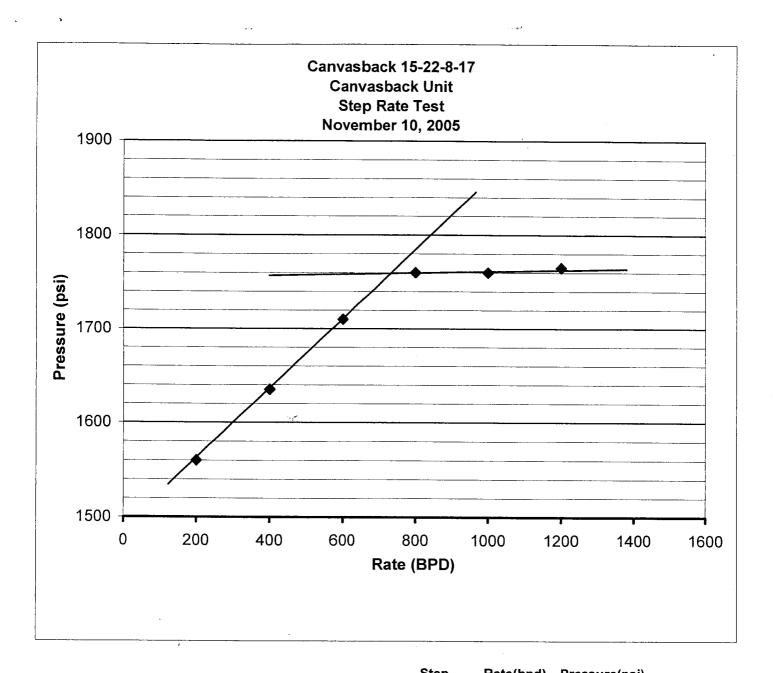
	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU77233			
SUNDRY	NOTICES AND REPO	ORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
o not use this form for proposals to drill no to drill horizontal lat	7. UNIT or CA AGREEMENT NAME: CANVASBACK UNIT			
1. TYPE OF WELL: OIL WELL	8. WELL NAME and NUMBER: CANVASBACK 15-22-8-17			
2. NAME OF OPERATOR: Newfield Production Company				9. API NUMBER: 4301332240
	TY Myton STATE UT	ZIP 84052	PHONE NUMBER 435.646.3721	10. FIELD AND POOL, OR WILDCAT:  Monument Butte
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 2056 FEL	910 FSL			COUNTY: Duchesne
OTR/OTR, SECTION, TOWNSHIP, RANGE,	MERIDIAN: SW/SE, 22, T8S, R17E			STATE: Utah
II. CHECK APPROI	PRIATE BOXES TO INDICATI	E NATURE (	OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYP	E OF ACTION TY	N <u>SubDate</u> PE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)	ACIDIZE ALTER CASING	DEEPEN FRACTURE	FREAT	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL
Approximate date work will	CASING REPAIR CHANGE TO PREVIOUS PLANS	NEW CONST		TEMPORARITLY ABANDON TUBING REPAIR
SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  11/14/2005	CHANGE TUBING CHANGE WELL NAME CHANGE WELL STATUS COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE	RECLAMAT		VENT OR FLAIR WATER DISPOSAL WATER SHUT-OFF  OTHER: - Step Rate Test
	OMPLETED OPERATIONS. Clearly show a	-		
	d on the subject well on November 1 d is requesting that the maximum al			
			Accepted by the Utah Division o	e f ina
			Utah Division o oil, Gas and Min OR RECORD	

NAME (PLEASE PRINT) Cheyenne Batemen

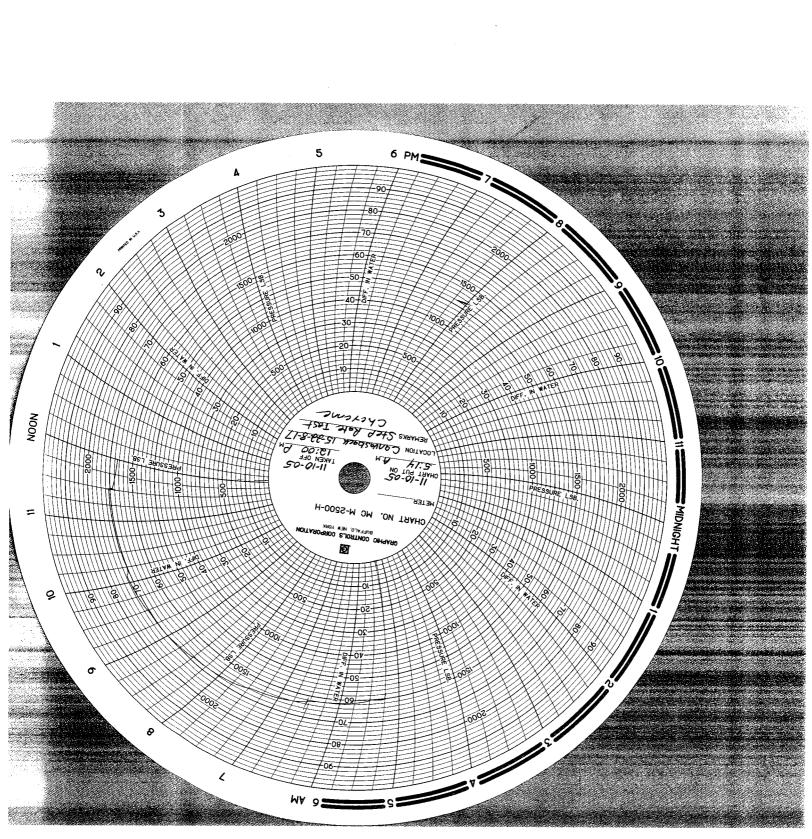
TITLE Well Analyst Foreman

SIGNATURE DATE 11/14/2005

(This space for State use only)



			step	rate(ppd)	Pressure(psi)
Start Pressure:	1505	psi	1	200	1560
Instantaneous Shut In Pressure (ISIP):	1765	psi	2	400	1635
Top Perforation:	5755	feet	3	600	1710
Fracture pressure (Pfp):	1760	psi	4 ,	800	1760
FG:	0.741	psi/ft	5	1000	1760
		•	6	1200	1765



### Step Rate Test (SRT) Analysis

Date:	11/14/2005	Operator:	Newfield Pro	duction Cor	npany	
		Well:	Canvasback			
		Permit #:	UT20855-064	06415		
	Enter ti	he following data:				
		Specific Gra	wity (sg) of injectate =	1.005	g/cc	
		• •	top perforation (D) =	5755	g feet	
	Top of permitted injection	zone depth (blank=use top perfora			feet	
	1 0 1	ed Formation Parting Pressure (Pj		1760	psi	
		Instantaneous Shut In Pressure		1765	r psi	
	Bottom Hole Pa	rting Pressure (Pbhp) from downho	, , , ,		psi	
<u>Par</u>	t One - Calculation	on of Fracture Gradie  Calculated Fracti	<del></del>	0.741	psi/ft.	
			where to = Philip / D. Alote: this form		<del></del>	
			where jg = 1 onp / D (1 voic. this form.	ula uses the downhole recorded bot	tom hole parting pressure if available) =	
	D = depth used = 5755	Phtp	used = 4264	ula uses the downhole recorded boo	tom hole parting pressure if available) =	
	·	Phip ated Bottom Hole Parting I	nsed = 4264	ula uses the downhole recorded bot  4264	tom bole parting pressure if available) =	
	·	nted Bottom Hole Parting I	nsed = 4264	4264	psi	
	·	nted Bottom Hole Parting I	nsed = 4264  Pressure (Pbhp) = ressure (Pbbp) = Formation Fracture Pressur	4264	psi	
	Calcula	nted Bottom Hole Parting F to calculate Bottom Hole Parting P. (Uses lesser of ISIP or Psp) Value	nsed = 4264  Pressure (Pbhp) =  ressure (Pbbp) = Formation Fracture Pressur nsed = 1760	<b>4264</b> x (ISIP or Pfp) + (0.433 * SG	psi *D)	
<u>P2</u>	Calcula	nted Bottom Hole Parting I	nsed = 4264  Pressure (Pbhp) =  ressure (Pbbp) = Formation Fracture Pressur nsed = 1760	<b>4264</b> x (ISIP or Pfp) + (0.433 * SG	psi *D)	
	Calcula art Two - Calcula	nted Bottom Hole Parting F to calculate Bottom Hole Parting P. (Uses lesser of ISIP or Psp) Value	nsed = 4264  Pressure (Pbhp) =  ressure (Pbbp) = Formation Fracture Pressur nsed = 1760	<b>4264</b> x (ISIP or Pfp) + (0.433 * SG	psi *D)	
	Calcula art Two - Calcula	nted Bottom Hole Parting F to calculate Bottom Hole Parting P. (Uses lesser of ISIP or Pfp) Value tion of Maximum All	nsed = 4264  Pressure (Pbhp) =  ressure (Pbhp) = Formation Fracture Pressur  nsed = 1760  lowable Injection	4264 *(ISIP or P\$) + (0.433 * SG or Pressure (	psi *D)  MAIP)  psig	



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION 8** 

999 18<sup>™</sup> STREET - SUITE 200 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

DEC - 2 2005

Ref: 8P-W-GW

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Michael Guinn Vice President - Operations Newfield Production Company Route 3 - Box 3630 Myton, UT 84502 Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

43.013.32240

RE: UNDERGROUND INJECTION CONTROL (UIC)

Minor Permit Modification Increase Injection Pressure: No. 1 EPA Permit No. UT20855-06415 Canvasback No. 15-22-8-17 SW SE Sec. 22 - T8S - R17E

Duchesne County, Utah

Dear Mr. Guinn:

The Region VIII Ground Water Program offices of the Environmental Protection Agency (EPA) received from Newfield Production Company (Newfield) the results and analysis of a November 10, 2005 Step-Rate Test (SRT) run on the Canvasback No. 15-22-8-17 enhanced recovery injection well, EPA Permit No. UT20855-06415. Included with the results was a request to increase the maximum allowable injection pressure (MAIP) from 1755 psig to 1760 psig.

EPA has reviewed the Permit File, and the submitted SRT information show that the formation parting pressure of the injection zone was reached under the conditions recorded during the test. Based upon this test and the EPA analysis, the Director has determined that a pressure of 1760 psig, measured at the surface, is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone overlying the injection zones, and underground sources of drinking water (USDW) will continue to be protected.

DEC 07 2005



Therefore, pursuant to 40 CFR §144.41 (e), the EPA hereby modifies EPA Permit No. 20855-06415 and authorizes a MAIP of 1760 psig for the Canvasback No. 15-22-8-17 enhanced recovery injection well.

Should Newfield in the future choose to request a modification to the approved MAIP, new supporting data such as a new SRT will be required as part of your request. In order to inject at pressures greater than the permitted MAIP during any future test(s), the permittee must receive prior authorization from the Director.

If you have any questions in regard to the above action, please contact Dan Jackson of my staff by calling 303-312-6155, or 1-800-227-8917 (Ext. 6155).

Please send all <u>compliance</u> correspondence relative to this well to the <u>ATTENTION</u>: <u>NATHAN WISER</u>, at the letterhead address citing <u>MAIL CODE</u>: <u>8ENF-UFO</u> very prominently. You may call Mr. Wiser at 303-312-6211, or 1-800-227-8917 (Ext. 6211).

Sincerely,

for Stephen S. Tuber

Dola la Rhom

Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

cc: Maxine Natchees
Acting Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe

Elaine Willie
Environmental Coordinator
Ute Indian Tribe

Chester Mills
Superintendent
Bureau of Indian Affairs
Uintah & Ouray Indian Agency

David Gerbig Operations Engineer Newfield Production Company Denver, Colorado

Gil Hunt Technical Services Manager State of Utah - Natural Resources

Matt Baker Petroleum Engineer Bureau of Land Management Vernal District

Nathan Wiser 8ENF-UFO

#### STATE OF UTAH

		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-77233		
SUNDRY	NOTICES AND REPO	ORTS ON W	ELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to dr wells, or to drill horizont	depth, reenter plugged	7. UNIT or CA AGREEMENT NAME: GMBU		
I. TYPE OF WELL: OIL WELL		8. WELL NAME and NUMBER: CANVASBACK 15-22-8-17		
2. NAME OF OPERATOR:				9. API NUMBER:
NEWFIELD PRODUCTION COM	/IPANY	In.	OVER ATTA (DER	4301332240  10. FIELD AND POOL, OR WILDCAT:
3. ADDRESS OF OPERATOR: Route 3 Box 3630	CITY Myton STATE UT		one number 35.646.3721	MONUMENT BUTTE
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 910 FSL 2				COUNTY: DUCHESNE
OTR/OTR. SECTION. TOWNSHIP. RANGE	MERIDIAN: SWSE, 22, T8S, R17E			STATE: UT
	PRIATE BOXES TO INDICAT			ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE	OF ACTION	
☐ NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREA	ΛT	SIDETRACK TO REPAIR WELL
Approximate date work will	CASING REPAIR	NEW CONSTRUC	NOIT	TEMPORARITLY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHA	NGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABA	NDON	VENT OR FLAIR
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK		WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (S	TART/STOP)	WATER SHUT-OFF
Date of Work Completion:	COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION	OF WELL SITE	OTHER: - Five Year MIT
04/14/2010	CONVERT WELL TYPE	RECOMPLETE -	DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR C	OMPLETED OPERATIONS. Clearly show	all pertinent details in	cluding dates, depths,	volumes, etc.
On 04-06-2010 Nathan W	iser with the EPA was contacted cor st on 04-12-2010. On 04-14-2010 the e well was injecting during the test.	ncerning the 5 yea he casing was pre	r MIT on the abov ssured up to 1340	e listed well. Permission was given at psig and charted for 30 minutes
EPA# UT 20855-06415	API# 43-013-32240			
			Accepted Utah Div Oil, Gas ar FOR RECO	ision of nd Mining
Lucy Chayer			Administrative As	reintant

(This space for State use only)

RECEIVED APR 2 0 2010

DATE 04/16/2010

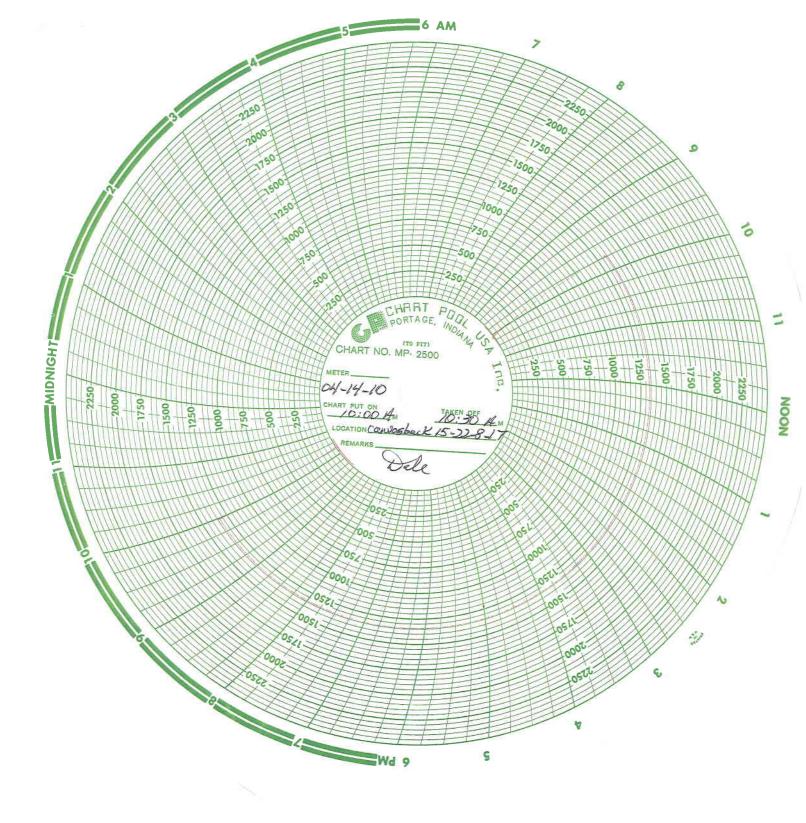
# Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test U.S. Environmental Protection Agency Underground Injection Control Program 999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: Test conducted by: Others present:	Dale Gil	es	Date: <u>04/</u>	14 110				
Well Name: Cawashack 15-228-17 Type: ER SWD Status: AC TA UC Field:  Location: Sec: 22 T 8 N/S R/7 E/W County: Duchesus State: Ut Operator: New Field Production Co.  Last MIT: / Maximum Allowable Pressure: 1760 PSIG								
Is this a regularly scheduled test?    Yes   No   Initial test for permit?   Yes   No   Test after well rework?   Yes   No   Well injecting during test?   Yes   No   Pre-test casing/tubing annulus pressure:								
MIT DATA TABLE	Test #1	•	Test #2	Test #3				
TUBING	PRESSURE		T					
Initial Pressure	1697	psig	psig	1	osig			
End of test pressure	1697	psig	psig	I	osig			
CASING / TUBING	ANNULUS		PRESSURE					
0 minutes	1340	psig	psig	F	sig			
5 minutes	1340	psig	psig	p	sig			
10 minutes	1340	psig	psig	p p	sig			
15 minutes	1340	psig	psig	p	sig			
20 minutes	1340	psig	psig	p	sig			
25 minutes	1340	psig	psig	p	sig			
30 minutes	1340	psig	psig	p	sig			
minutes		psig	psig	p	sig			
minutes		psig	psig	p	sig			
RESULT	184 Pass	[ ]Fail	[ ] Pass [ ]Fail	I Pass   IFa	ii i			

Does the annulus pressure build back up after the test? [ ] Yes [ No MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Cianatura of Mitnace



Sundry Number: 61722 API Well Number: 43013322400000

	STATE OF UTAH		FORM 9				
1	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-77233				
SUNDR	RY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
current bottom-hole depth,	Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.						
1. TYPE OF WELL Water Injection Well	8. WELL NAME and NUMBER: CANVASBACK 15-22-8-17						
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013322400000				
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT		ONE NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0910 FSL 2056 FEL			COUNTY: DUCHESNE				
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWSE Section: 2	STATE: UTAH						
11. CHEC	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOF	T, OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
5 YR MIT perform casing was pressur no pressure loss. pressure was 1	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR	On 03/17/2015 the d for 30 minutes with ng the test. The tbg was not an EPA	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER: 5 YR MIT  DEPths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining  FOR RECORD ONLY  March 24, 2015				
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE					
SIGNATURE N/A	435 646-4874	Water Services Technician  DATE 3/23/2015					
14//3		U/LU/LUIU					

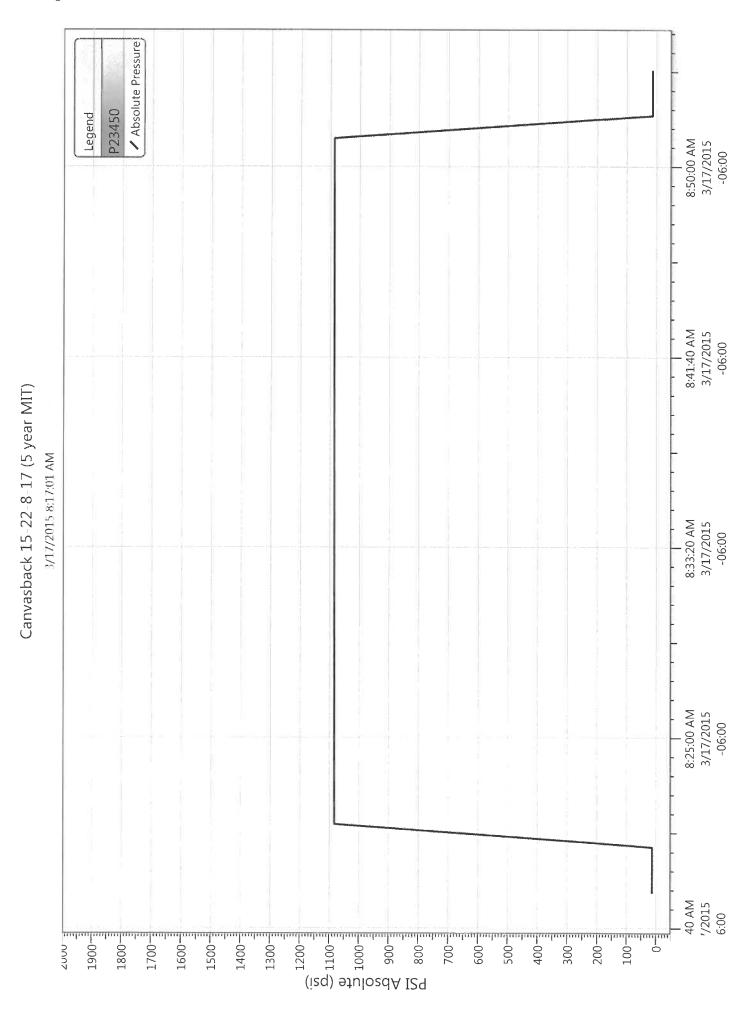
Sundry Number: 61722 API Weller Harry 1907 1400000

Signature of Witness:\_

# Casing or Annulus Pressure Mechanical Integrity Test U.S. Environmental Protection Agency Underground Injection Control Program 999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness:  Test conducted by:  Others present:  Well Name:  Canvasback 15-20-8-17 Type: ER SWD Status: AC TA UC								
Well Name: CAN VASTACK 13-33-4 Type: ER SWD Status: AC TA UC								
Field: //OFWINE	Field: Morament Butte  Location: SW/SE Sec: 22 T & N/S R/7/E/W County: Duchesne State: ut							
Operator: AlexAC 9/0	Droduct	Con Ce	CE, W County	· June		State: CU	•	
Operator: Newfield production Co  Last MIT: / Maximum Allowable Pressure: 1950 PSIG								
Is this a regularly scheduled test? [ Yes [ ] No Initial test for permit? [ ] Yes [ No Test after well rework? [ ] Yes [ ] No Well injecting during test? [ ] No If Yes, rate:								
MIT DATA TABLE	Test #1		Test #2			Test #	13	
TUBING	PRESSURE			1	-			$\neg$
Initial Pressure	1343	psig	tent out	psig			D	osig
End of test pressure	1343	psig		psig				osig
CASING / TUBING	ANNULUS		PRESSURE				-77	一
0 minutes	1083	psig		psig		16.1	ŗ	osig
5 minutes	1085	psig		psig			F	osig
10 minutes	1086	psig		psig			F	psig
15 minutes	1087	psig		psig	2		F	psig
20 minutes	1087	psig		psig			J	psig
25 minutes	1087	psig		psig			1	psig
30 minutes	1087	psig		psig			1	psig
minutes		psig		psig	,		]	psig
minutes		psig		psig				psig
RESULT .	Pass	Fail	Pass	[ ]Fail		Pass	F	ail
Does the annulus pressure build back up after the test? [ ] Yes [ ] No  MECHANICAL INTEGRITY PRESSURE TEST  Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:								

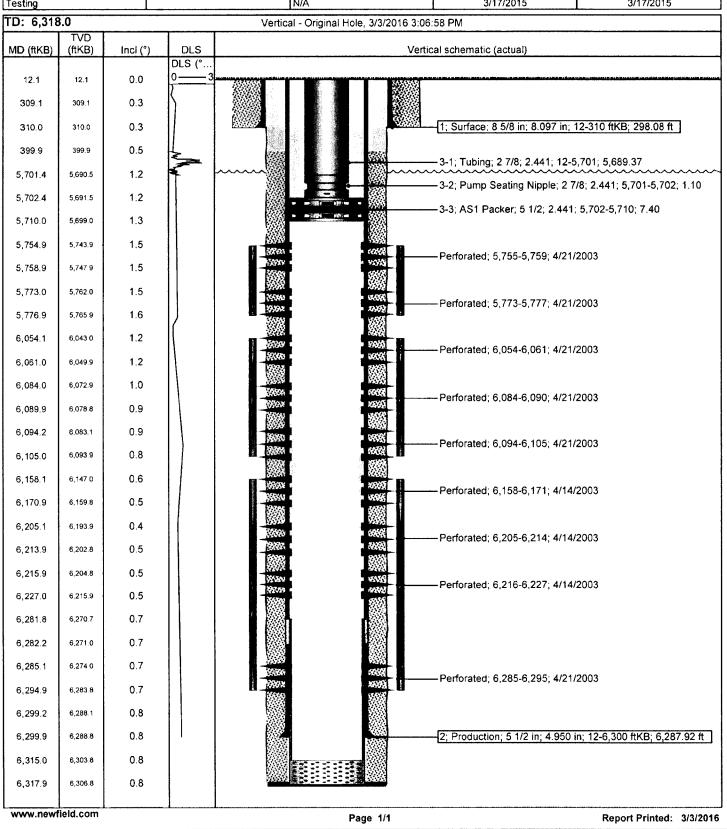
Sundry Number: 61722 API Well Number: 43013322400000





Well Name: Canvasback 15-22-8-17

Schematic 43 - 013 - 32240





### Newfield Wellbore Diagram Data Canvasback 15-22-8-17

Surface Legal Location 22-8S-17E				API/UWI 43013322400000		Lease		
County	-	State/Province		Basin		Field Name		
Duchesne		Utah		5 18 2 2		GMBU CTB7		
Well Start Date 2/21/2	2003	Spud Date 2/21/	2003	Final Rig Release Date 3/24/2003		On Production Date 4/24/2003		
Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth (ftKB)		Total Depth All (TVD) (ftKB)		PBTD (All) (ftKB)		
5,180 5,168 6,318.						Original Hote - 6,318	3.0	
Casing Strings								
Csg l Surface	Des	Run Date 2/21/2003	OD (in) 8 5/8	ID (in) 8.097	Wt/Len (lb/ft) 24.00	Grade	Set Depth (ftKB) 310	
Production		3/24/2003	5 1/2	4.950	15.50		6,300	
Cement String: Surface, 310	HKR 3/8/2003							
Cementing Company	3/1/2003		<u></u>	Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	
BJ Services Compar	BJ Services Company				310.1 Amount (sacks)	Class	Estimated Top (ftKB)	
w/ 2% CaCL2 + 1/4#	/sk Cello-Flake			Fluid Type Lead	250		12.0	
String: Production,	6,300ftKB 3/24/20	03						
Cementing Company BJ Services Compar	nv			Top Depth (ffKB) 400.0	Bottom Depth (ftKB) 6,318.0	Full Return?	Vol Cement Ret (bbl)	
Fluid Description	<i>'</i>			Fluid Type	Amount (sacks)	Class	Estimated Top (ftKB)	
w/ 10% gel + 3 % Ki	CL, 3#'s /sk CSE + 2	2# sk/kolseal + 1/4#'s	/sk Cello Flake	Lead Fluid Type	310 Amount (sacks)	PL II Class	400.0 Estimated Top (ftKB)	
W/ 2% Gel + 3% KC	L, .5%EC1,1/4# sk (	C.F. 2% gel. 3% SM		Tail	400	50/50 Poz	3,000.0	
Tubing Strings				In . O.		ICAL DANK /BY/S		
Tubing Description Tubing				Run Date 4/14/	/2005	Set Depth (ftKB)	5,709.9	
Item Des	Jts	OD (in) ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Bim (ftKB)	
Tubing	177	2 7/8 2.441	6.50	J-55	5,689.37	12.0	5,701.4	
Pump Seating Nipple	9	2 7/8 2.441			1.10 7.40	5,701.4 5,702.5	5,702.5 5,709.9	
AS1 Packer Rod Strings		5 1/2 2.441			7.40	5,702.5	5,709.9	
Rod Description				Run Date		Set Depth (ftKB)		
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Blm (ftKB)	
Other in Hole								
Fill	D	es		Top (ftKB) 6,315	Btm (ftKB)	Run Date 6/7/2004	Pull Date	
Perforation Interval	e			0,313	0,316	0/1/2004		
Stage#	Zone	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Phasing (°)	Nom Hole Dia (in)	Date	
3 LODC, Ori	~	5,755	5,759	4			4/21/2003	
3 LODC, Ori		5,773	5,777	4			4/21/2003	
2 CP .5, Orig	-	6,054	6,061	4			4/21/2003	
2 CP1, Origi		6,084	6,090	4.			4/21/2003	
2 CP1, Origi		6,094	6,105	4			4/21/2003	
1 CP2, Origi		6,158 6,205	6,171 6,214	4			4/14/2003 4/14/2003	
1 CP3, Origi 1 CP3, Origi		6,216	6,227	4			4/14/2003	
1 CP4, Origi		6,285	6,295	4			4/21/2003	
Stimulations & Trea		0,200	0,230	7	<u> </u>	<u> </u>		
Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)	
1	2,020	0.75	27.0	2,100				
2	1,850	0.75	26.0	2,900				
$\begin{bmatrix} 3 \\ 4 \end{bmatrix}$	1,790	0.74	26.0	3,150				
5								
6	:							
Proppant				<u> </u>		<u> </u>		
	Total Prop Vol Pumped			Total Ad	d Amount	·		
Stage#	(lb)	Proppant White San	d 98671 lb	rotal Ad	a Aniount			
2		Proppant White San						
3		Proppant White San						
4								
www.newfield.con	n		Pa	ge 1/2		Repor	t Printed: 3/3/2016	



### Newfield Wellbore Diagram Data Canvasback 15-22-8-17

Proppant	<del></del>			
	Total Prop Vol Pumped (lb)			
Stage# 5	(lb)	Total Add Amount	<del></del>	
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